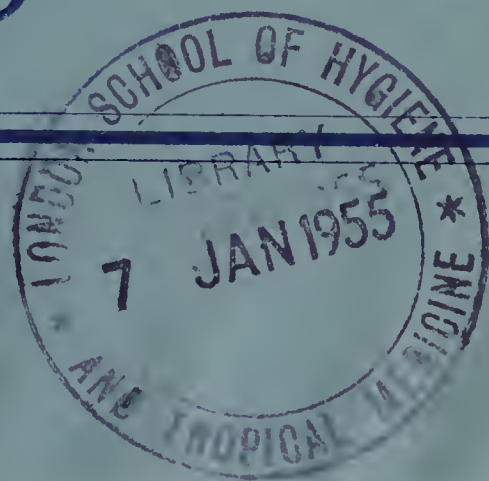




COLONIAL REPORTS

**NORTHERN
RHODESIA
1953**



Crown Copyright Reserved

LONDON : HER MAJESTY'S STATIONERY OFFICE
1954

Price 3s 6d net

S.O. Code No. 58-1-31-53

15/12/54


This Report has been prepared by the
Northern Rhodesia Information Department
which holds the copyright of all photographs



COLONIAL OFFICE

Page

PRINTED BY THE GOVERNMENT PRINTER
LUSAKA, NORTHERN RHODESIA



Digitized by the Internet Archive
in 2019 with funding from
Wellcome Library

<https://archive.org/details/b31409866>

PART I

Review of 1953

“ The year 1953 is one of opportunity in Central Africa.”

This extract, which set the tempo for political activity during 1953, opens the White Paper on the report by the conference on Federation held in London in January, 1953. From this report, federation of the Rhodesias and Nyasaland moved surely towards its legal proclamation by an Order in Council of 1st August. Accepted by the legislatures of the three territories directly concerned, and formally debated and approved by the British Parliament, this report, together with the subsequent Order in Council, marked the end of long discussion and argument as to possible means of forming a closer political association between the two protectorates of Northern Rhodesia and Nyasaland respectively and the colony of Southern Rhodesia. This had originated in 1939 with a Royal Commission under the chairmanship of Lord Bledisloe, but only gained its final momentum during 1952.

Considerable publicity was given to this report and the steps taken towards its implementation so that all sections of the community were kept well informed. Public opinion, however, remained divided. The European public gave its final approval by electing six members of the Federal Party to the new Federal Parliament, out of a possible seven seats. Leaders of this party had initiated and led the successful discussions on federation, and within this mandate their election may be taken as showing the confidence and support of the majority of Europeans to federation. Vocal African public opinion in general lessened its active opposition to the scheme and to that extent has acquiesced in federation. The practical outcome of federation is, however, being watched intently by Africans, and not without some feelings of uncertainty and misgiving on their part. Criticism of federation has been generally less noticeable since the Federal Government was formed and it will not be until 1954, when the apparatus of federation starts to operate more fully, that such criticisms will be either justified or rebutted.

On 23rd September, 1953, the Secretary of State for the Colonies announced from London the conclusions of Her Majesty's Government regarding the constitutional development of Northern Rhodesia.

During the course of talks being held in London at that time, it had not been possible to reach an agreement with the delegates from Northern Rhodesia who represented both Europeans and Africans. It was stated that the present system of racial representation in the territorial legislature was by its very nature a contentious issue, and as such, it was the duty of Her Majesty's Government to ensure that the balance should be fairly held by the official members.

The announcement gave details of the constitutional changes which would be implemented before the next territorial election early in 1954. The number of European elected Members in the Legislative Council is to be increased from ten to twelve and the number of African Members from two to four, while in the Executive Council there will be four unofficial Members (three elected and one nominated), all of whom will hold portfolios. At the same time the number of official Members in Executive Council will be reduced to five. It is expected that as the Federal Government takes up its responsibilities in the economic field, the post of Economic Secretary will disappear so that the number of officials in Legislative Council is reduced from nine to eight.

These changes were vigorously opposed by elected Members of Legislative Council, resulting in the decision of its European Members to withdraw their "co-operation" from the Government, to leave the Governor's Executive Council, and to resign the two ministerial portfolios held by unofficial Members. This constitutional crisis continued for four weeks, ending in December with the announcement that the Secretary of State for the Colonies had agreed, at the request of the elected Members of the Legislative Council, to visit Northern Rhodesia early in January of 1954 to discuss the constitutional position with the unofficials of Legislative Council and members of the African Representative Council. At the same time it was stated that, whatever the outcome of these discussions, there would be no variation in the constitutional changes set out in the announcement of 23rd September, 1953, and that no changes were contemplated during the life of the next Legislative Council unless all parties were in agreement and Government was prepared to accept the changes. As the life of a Legislative Council is normally five years there is not likely to be any further important revision of the constitution until 1958-59.

NEW ORDINANCES

Seventy-two Ordinances were enacted during 1953, the majority of which represented minor amendments to existing legislation, but special mention should be made of the following:

The Defamation Ordinance consolidated the Statute Law of the United Kingdom relating to libel, other than criminal libel, which was hitherto applicable to the Territory by virtue of Article 27 of the

Northern Rhodesia Orders in Council, 1924 to 1951, and to amend that law by the incorporation therein of the substantive provisions of the Defamation Act, 1952, of the United Kingdom Parliament.

The Fisheries Development Ordinance which was enacted to implement the recommendations of the Fisheries Advisory Committee, but which has not yet been brought into force, established a Fisheries Development Board charged with the task of co-ordinating, assisting and controlling the development and exploitation of the fisheries of the Territory.

The Juveniles Ordinance replaces the Juvenile Offenders Ordinance and deals comprehensively both with all aspects, other than adoption, of the protections and welfare of juveniles and with juvenile delinquency. The Ordinance divides juveniles into two classes, namely, juveniles in need of care and juvenile delinquents. The latter class will continue to be dealt with by magistrates sitting as juvenile courts, whereas the former class will be dealt with by special courts consisting of a chairman with other persons to assist and advise him. In addition the Ordinance deals with the control of foster parents, the prevention of offences against juveniles, the control of entertainments by and for juveniles, and the establishment and conduct of approved schools and reformatories.

The Northern Rhodesia Territorial Force Ordinance was enacted but not brought into force during the year, and provides for the establishment of a Territorial Army Force for the defence of the Territory.

The Noxious Weeds Ordinance gives power to prescribe plants as noxious weeds and provides for the inspection of land and the eradication of noxious weeds found thereon.

The Victoria Falls Trust Ordinance was enacted but not brought into force during the year, pending the necessary administrative arrangements being made. It provides for the constitution of the Victoria Falls Trust and makes the Trust the body responsible for the control, preservation and development of the Victoria Falls area, the control of which was previously vested in a committee appointed by the Ancient Monuments Commission.

ANOTHER RECORD TRADE YEAR

Northern Rhodesia's foreign trade in 1953 continued the trend of the previous year with another marked increase. Imports rose by £9,000,000 to £51,833,000 and exports (including re-exports) by £12,250,000 to £94,833,000. The favourable visible balance of trade, therefore, has reached the unprecedented figure of £43,000,000, an increase of over £3,000,000 on that of 1952. The Territory's export

trade was again dominated by copper which represented 91 per cent. of the total exports in 1953. With the addition of lead and zinc, all metals formed 96 per cent. of total exports. The United Kingdom again provided the bulk of this trade—36.5 per cent. of total imports and 60.3 per cent. of total exports, while the proportion of exports going to the United States of America increased from 6.2 per cent. in 1952 to 18.7 per cent. in 1953. Imports from non-sterling countries dropped by a little over £250,000 during 1953, while exports increased by nearly £14,500,000, giving to the Territory a favourable balance of trade with non-sterling countries of £23,754,000. This is an increase of £14,618,000 over 1952 figures.

INDUSTRIAL DEVELOPMENT

The expansion of industry and commerce in Northern Rhodesia continued throughout 1953. Existing mines expanded and prospecting activities by both companies and individuals increased. Details of this expansion are given under the section of the report entitled “ Mining ”. Sites for light and heavy industrial undertakings continued to be developed at most main towns. The motor trade in particular expanded and many new garages and workshops were opened. A heavy motor engineering firm started building its premises in the Territory and an existing heavy engineering firm was in the process of starting a nut and bolt factory. A firm started the production of terrazzo tiles.

Besides new firms several old-established firms were erecting new premises in order to cope with expanding trade. The demand for housing within the Territory kept the building industry working at full pressure and the number of small building concerns, both European and African owned, increased considerably. Steel erection companies were active during the year building petrol storage tanks for two petrol companies.

During the year the report of the consultants on the Kafue Hydro-Electric Scheme was accepted by Government and subsequently the Kafue Hydro-Electric Authority was set up with the duty of proceeding with the scheme, which it is expected will take five to six years to build and will produce an estimated 375 megawatts at 80 per cent. load factor.

Development of secondary industries is still handicapped by the lack of raw materials and by high transport costs. There were insufficient suitably serviced sites but many local authorities made plans during the year for improvements in roads, railway sidings, and water and electric power. The Kafue Hydro-Electric Scheme was approved by the Legislative Council during 1953 and this will assist the formation of a long-term policy on secondary industries.

FAVOURABLE YEAR FOR FARMERS

The weather was generally favourable to farmers during 1953 and as a result territorial production of maize exceeded consumption. Food supplies in all areas were adequate and useful surpluses of rice and ground-nuts were produced for sale. On the other hand wheat production declined to negligible proportions, and low prices for tobacco, especially from the Eastern Province, resulted in a considerable fall in the number of registered growers.

The livestock industry also benefited from a favourable year and the cattle population continued to increase, but the Namwala and Mazabuka districts were afflicted by an extensive outbreak of foot-and-mouth disease. Slaughter cattle from Bechuanaland continued to be imported, providing about 45 per cent. of the Territory's total consumption. The dairy industry made steady progress although there is still much scope for expansion.

FUEL AND TRANSPORT

During 1953 Northern Rhodesia consumers received more coal from the Wankie Colliery in Southern Rhodesia than in the previous year, but this was still not sufficient for all requirements. Copper mines were obliged to use large quantities of wood fuel and they imported expensive coal from the Union of South Africa.

Miscellaneous users of coal received approximately 65 per cent. of what they needed although average monthly despatches were 6,000 tons compared with 5,200 tons in 1952.

The railway systems serving Northern Rhodesia continued to handle increasing amounts of traffic throughout the year. This was possible because the new locomotives and rolling stock were put into service. The output of the Wankie Colliery, albeit restricted, was moved without difficulty. The port of Beira handled a record tonnage of 2,643,223 short harbour tons, which was 3.05 per cent. higher than the previous year's record. Phasing arrangements kept the port clear and prevented delays to shipping during the months when rain hindered the port work, but this resulted in an accumulation of cargo for Beira awaiting shipment from ports in the United Kingdom. Northern Rhodesian importers continued to make only very limited use of the port of Lobito and the Lobito Railway, although both were in a position to handle more traffic had it been offered. Although the Rhodesia Railways had raised their rates and fares on 1st July, 1952, rising costs necessitated a further increase and in October, 1953, a surcharge of 10 per cent. was imposed.

COMMUNICATIONS

The reconstruction of main roads continued and six firms of contractors and seven Public Works Department construction teams were employed. At the end of the year the total mileage of Class I roads open to traffic was 379, and of Class II roads 265.

The 6,600-foot main runway at Ndola Airport was reconstructed with bituminous surfacing. The new airport at Mongu was completed, and is of unusual construction, comprising two layers of locally made bricks laid on the deep Kalahari sand and jointed with bitumen. It is capable of carrying Viking class aircraft.

HEALTH SERVICES

In spite of difficulties due to shortage of trained African staff the work of the department continued to expand throughout the year, and increased medical facilities were provided both in urban and rural areas. A most encouraging feature of rural health work is the popularity of any health centre to which a trained health sister can be posted, and it is hoped to expand this development to the utmost. Subsidies to missions for medical work in all aspects were given as in previous years and grants were increased to a number of missions where medical work expanded during the year.

New African hospitals at Choma and Balovale were opened during the year. By permission of Her Majesty the latter hospital has been named Queen Elizabeth's Hospital in commemoration of Her Majesty's Coronation. Construction of a new African hospital at Fort Rosebery is in hand, and European cottage hospitals at Choma and Mazabuka are nearing completion.

New training schools for African hygiene assistants in Barotseland Protectorate and at Katete in the Eastern Province were opened during the year, and the first trainees from the Ndola School completed their training in June, 1953, and were posted for work in rural areas.

A large expansion programme is proposed to include the territorial mental hospital at Lusaka, the combined hospital at Kitwe, the new Livingstone European Hospital, extensions to the European Hospital, Lusaka, and extensions to the African Hospital and Medical Training School, Lusaka.

EDUCATION

The total increase in the number of European scholars at Government, Government-aided and private schools was 1,113. Government schools accommodated 7,812 of a total of 9,336 pupils. Five schools, three of them single-teacher schools at rural centres, were opened during the year.

The Cadet Corps, whose establishment rose from five to six hundred, held its first annual camp.

The total number of Indian and Euro-African scholars enrolled at schools in the Territory is 492, as compared with 391 for 1952.

Nearly 154,000 African scholars attended Government and assisted schools and training institutions in 1953 and the estimated expenditure by the Government on African education rose above the actual expenditure for 1952 by £181,192 to £744,440. Two new junior secondary schools and three new junior trades schools were opened. The African Education Regulations and Unified African Teaching Service Regulations made under the 1951 African Education Ordinance were published during the year and it is hoped that all the local education authorities and teaching service committees will be operating early in 1954. The report of the Carr-Saunders Commission on higher education for Africans in Central Africa was issued in March and information at the end of the year showed that it was hoped that arts and science faculties would be started at the Rhodesia University College in Salisbury at the beginning of 1956.

POPULATION

A total of 8,195 Europeans, 649 Asiatics and seventeen Coloured persons entered Northern Rhodesia to take up residence. Of the Europeans, 1,782 came from the United Kingdom, 3,793 from the Union of South Africa, and 1,929 from Southern Rhodesia. It was estimated that the European population totalled 50,000 at the end of the year. Estimates of the Asiatic-Coloured populations and of the African population are 5,000 and 1,960,000 respectively.

The African urban population continues to increase in step with the expansion of trade, industry and European urbanisation, and gives rise to the inevitable social problems of housing and crime.

COST OF LIVING

The cost-of-living index rose by four points during the year, as compared with ten points during 1952, and remains lower than in adjacent territories. Most retail prices in Northern Rhodesia continued to rise, but at a slower rate than the previous year, as the prime costs of imported goods were reasonably stable.

Charges for rented property have a bearing on the general cost of living, and due to the increasing cost of building, rents in respect of new construction continued to rise.

At townships off the line of rail prices of imported necessities tend to rise due to road transport charges, but this increase is offset to some extent by lower prices for locally produced fresh foods.

IMPORTANT VISITORS

During the year official visits were paid by the Governor-General of the Federation, Lord Llewellyn; the Federal Prime Minister, Sir Godfrey Huggins, and Dr. A. C. Thomas, Director-General of Medical Services in the Belgian Congo. Other distinguished visitors included Lady Astor; Sir Herbert Stanley, first Governor of Northern Rhodesia and a former Governor of Southern Rhodesia; Sir Edward Wilshaw, a former managing director of Cable and Wireless, and Lady Wilshaw; Lieut.-General Sir Otto Lund, Commissioner-in-Chief, St. John Ambulance Association; Mr. Frank la Macchia, United States Consul in Salisbury; Dr. Grantley Dick Read; Colonel F. Spencer Chapman, Director of the Outward Bound Trust; the Misses Rhodes, nieces of Cecil John Rhodes; Professor Debenham; Mr. C. W. Guillebaud, arbitrator in the African miners' wage dispute; and Mr. Kendall Taylor, the pianist. Mr. L. G. Troup, the agricultural expert, visited the Territory to report on European agriculture and land tenure; four visual aid experts: Mr. Clifton Ackroyd, Secretary of the Edinburgh Home Bureau for Visual Aids, and the Rev. W. Burton Martin, Dr. Donald Ebright, and Dr. Walter Vernon, representing American church organisations, toured the Territory. Mr. Hilary Phillips, in charge of agricultural broadcasts for the B.B.C. Overseas Services; Mr. L. Gilliam, head of the B.B.C. Features Department; Professor Powdermaker, working on a Guggenheim Fellowship and Mr. Geoffrey Tankard, examiner of the Royal Schools of Music, also paid visits to the Territory. Journalists and writers included Mr. Astley Hawkins, staff representative in Africa of Reuter's News Agency; Mr. Ernest Haas, photographer for the American magazine *Life*; Mr. Edwin Lahey, of the *Chicago Daily News*; Dr. Peter Sulzer, of Switzerland; Mr. Thomas E. Healey, Foreign Press Association, Rome; Mr. and Mrs. Harry Franck, American authors; M. George Grenier, French author; Mr. Schuyler Jones, American pressman; Mr. and Mrs. Olle Nyman, Scandinavian journalists; Mr. C. W. Acheson, *Pathfinder* staff journalist; and Dr. Karg, German journalist. Mr. H. Maclear Bate published his *Report on the Rhodesias* after his visit, and Mr. John Gunter was preparing his book *Inside Africa*.

DEVELOPMENT PLAN

During 1953 the Ten-Year Development Plan was revised. This revision was restricted almost entirely to financial aspects, but to conform with the new fiscal year of the Federation of the Rhodesias and Nyasaland, the life of the plan was extended by six months to the 30th June, 1957. From the knowledge and experience gained in the handling of more contracts it was possible to achieve more accurate estimates of projects not yet begun, and after allowing for increases in costs and for the inclusion of a few essential new requirements, the total cost of the plan has risen to £52m.

In this revision the various projects were split into two sections according to whether the department to which they were related was passing to federal or remaining under territorial control. It is estimated that between 1954 and 1957 the expenditure on federal projects will amount to £9m. and on territorial projects £14.5m.

As before, appropriations for development outside the Ten-Year Plan were made in 1953, notably:

Local Authorities	£ 1,650,000
Industrial Loans Board . .	100,000
Hydro-Electric Power . . .	500,000
Ndola Power Scheme . . .	500,000
Land Bank	750,000
Rhodesia Railways	2,000,000

The appropriation from territorial revenue to the Development Fund in 1953 was £5,600,000. A schedule of some of the development schemes in progress or initiated during 1953 is found at Appendix I.

PART II

Chapter 1: Population

Northern Rhodesia's European population at the end of 1953 was estimated to be 50,000. The total African population was estimated to be 1,960,000 and the number of Asiatic and Coloured persons about 5,000. The European figures showed an increase of nearly 13,000 on the total enumerated at the last official census, taken on 8th May, 1951. The total European population recorded on that day was 37,221, comprising 20,153 males and 17,068 females.

The Western Province was shown in the census of 1951 as having the largest number of Europeans, the total of 20,450 reflecting an increase of over 8,500 on the 1946 census, a greater increase than in any other province. Other big increases were recorded in the Central Province, where the population rose by over 4,000 to 10,047, and in the Southern Province where 4,781 Europeans were recorded, some 2,300 more than in 1946. The only province which showed a decrease between the two census dates was the Northern Province whose European population in 1951 was 574 compared with 898 in 1946. This was due mainly to the fact that since 1946 the Fort Rosebery and Kawambwa Districts were transferred from the Northern to the Western Province.

The 1951 census also showed that 5,458 Europeans were living in the adjoining townships of Kitwe and Nkana and their immediate neighbourhoods. In terms of its European population, therefore, this centre ranks as the largest in the Territory.

The number of Coloured persons in Northern Rhodesia increased since 1946 by 804 and, at the census date in 1951, the total stood at 1,092. The rate of increase was even higher among Asiatics, whose population rose from 1,117 in 1946 to 2,529 in 1951.

Africans in employment on 8th May, 1951, numbered 228,676, an increase of more than 87,000 on the 1946 figures. It was estimated that this total represented about 75 per cent. of the employable Africans in the Territory. The total comprised 202,580 adult males, 17,776 juveniles and 8,320 females. This was the first census in which African juveniles were separately enumerated.

Annual population estimates, population at census dates and figures showing European births, deaths, marriages and infant mortality are given in separate table (*see* Appendix II).

IMMIGRATION

During 1953 a total of 8,195 Europeans, 649 Asiatics and seventeen Coloured persons entered Northern Rhodesia to take up residence. Of the Europeans who entered, 1,782 came from the United Kingdom, 3,793 from the Union of South Africa, and 1,929 from Southern Rhodesia. The total numbers of immigrants comprised 4,277 males, 2,629 females, and 1,955 children under the age of sixteen.

Chapter 2: Occupations, Wages and Labour Organisation

EMPLOYMENT

Out of a population of some 50,000 Europeans in Northern Rhodesia it is estimated that there are 20,000 gainfully employed. Of this latter figure there were 6,700 employed in mining at the end of the year. It is estimated that 247,000 male and juvenile Africans and about 4,870 females were in wage earning employment out of a total population of 1,960,000. In December, 1953, 46,400 Africans were employed in mining; 40,000 in agriculture and about 35,000 in domestic service.

In Government service many vacancies for European staff could not be filled owing to the housing shortage. Some private firms also would have been willing to take on more staff if accommodation had been available. Some employers had difficulty in obtaining their requirements of African labour and the demand has increased steadily with the expansion of industry in the Territory.

The Department of Labour and Mines continued to operate a central employment registry for Europeans and Labour Officers in the field helped quite a number of persons to find work in their areas. Labour Officers also operated exchanges for Africans. During 1953 6,986 Africans registered with the exchanges and 3,293 were placed in employment; vacancies notified amounted to 10,182.

The flow of alien African migrant workers to the Territory continued during the year and there were 15,000 aliens employed at the end of the year. Of this number 5,700 came from Tanganyika Territory, 3,000 from Portuguese West Africa and 3,800 from Nyasaland. During the year 15,574 Northern Rhodesian Africans entered Southern Rhodesia and 14,231 Northern Rhodesian Africans returned to Northern Rhodesia from Southern Rhodesia.

WAGES AND CONDITIONS OF SERVICE

The industry of greatest importance in Northern Rhodesia is mining, especially copper mining, and wages in that industry tend to set the standard for other industries. The monthly wage range for African workers in the copper mining industry was from £4 to £18 10s.

for surface workers and from £4 10s. to £20 5s. for underground workers. These rates were awarded in an arbitration award of January, 1953, following the African Mineworkers' Trade Union strike in 1952. Free rations and housing are provided for the lower grades of workers. The average monthly wage for Europeans in the mining industry was £95 for surface workers and £105 for underground workers. These figures do not include the copper bonus, but include overtime, half basic shifts, safety bonuses, rescue team allowances, heat, light and other allowances, cost-of-living allowances, travelling time and stand-by duty.

In agriculture and industries other than mining the unskilled African worker earned cash wages of between 30s. and £4 10s. a month, and this group represented approximately 79 per cent. of African non-mining wage earners. Semi-skilled workmen earned wages which ranged between £3 and £5 10s. a month. For skilled workmen and other specialist workers the average wage was between £6 and £8 a month, rising to a maximum of £25 to £30 and in a few grades to £40 a month. Except for the specialist grades all workers received free food and housing, or cash in lieu, in addition to the cash wage. All industrial employees of Government were required to work a forty-five hour week, while the standard hours of work in the private building industry remained at forty-eight hours a week. In other industries a forty-eight hour week was normal, though in the cordwood cutting industry, where task work was common, workers could complete the task in three to four hours per day.

COST OF LIVING

There was a rise of ten points in the index for the price of foodstuffs during the year and a decrease of one point in both clothing and footwear and household stores. The overall rise in the cost of living was four points for all items by the end of the year. Since 1943 the following increases in the cost-of-living index have occurred: Foodstuffs 107 points, clothing and footwear 97 points, household stores 57 points and for all items an increase of 60 points.

LABOUR AND MINES DEPARTMENT

The Labour and Mines Department consisted of seven sections under the control of the Commissioner for Labour and Mines as follows: Headquarters, Labour, Mines, Apprentices, Workmen's Compensation, Trade Testing and the Central Employment Registry. The headquarters staff consisted of the Commissioner for Labour and Mines, his Deputy, a Statistical Officer, an Administrative Officer, a Boiler Inspector and six female clerks. In the field there was an inspectorate establishment of twenty Labour Officers and five African

Labour Assistants who cover all the districts on the railway line and in the Eastern Province. One officer was stationed in Salisbury, Southern Rhodesia, and in Johannesburg an officer is shared with the Nyasaland Government. The functions of these two Labour Officers are to watch the interests of Northern Rhodesian Africans in employment in Southern Rhodesia and in the Union of South Africa respectively. The chief objects of the Labour Branch of the department are the promotion and maintenance of good industrial relations and the task of seeing that legislation concerning the protection of labour is enforced. For geographical reasons the mine inspectorate and the seven professional officers in that branch of the department are stationed at Ndola which is within easy reach of the four big copper mines.

INDUSTRIAL RELATIONS

At the end of the year there were seven European trade unions in the Territory.

In the copper, lead and zinc mining industry daily paid workers are organised under the Northern Rhodesia Mine Workers' Union and monthly paid employees under the Northern Rhodesia Mine Officials and Salaried Staff Association. Other unions representing European labour are the Rhodesia Railway Workers' Union with their headquarters at Bulawayo, Southern Rhodesia, the Northern Rhodesia Allied Building Trade Workers' Union, the Northern Rhodesia European Civil Servants' Association, the Chilanga Cement Workers' Association, the Amalgamated Engineering Union, the Northern Rhodesia Association of Municipal Employees and the Northern Rhodesia Distributive and Allied Trades Union. There are two Indian and thirteen African unions in existence, the most important of these being the Northern Rhodesia African Mineworkers' Trade Union, whose membership represents approximately 60 per cent. of the Africans employed in mining. A Government Workers' Trade Union was formed during the year to organise those African employees of Government who are not members of the African Civil Service. No African trade unions were registered under the Trade Unions and Trade Disputes Ordinance during the year. As a result of an amendment to legislation during the year it was made compulsory for all trade unions—not only registered unions as in the past—to submit annual returns of revenue and expenditure and an auditor's report to the Registrar of Trade Unions. At the end of the year approximately 25 per cent. of the total adult African male workers in employment were members of trade unions.

Industrial relations throughout the Territory remained satisfactory during the year. There was one strike involving Europeans on one mine, called by the Northern Rhodesia Mine Workers' Union. This

strike arose from an alleged breach of agreement between one of the mining companies and the union over the employment of outside contractors on mine property at one particular mine. A total of 1,734 European man-days were lost and this also caused the loss of 11,731 man-days for Africans. The dispute was eventually settled on a basis involving all the mining companies by direct negotiation between the parties after conciliation had failed. There was one other dispute involving the loss of seventy-four European man-days.

There were forty disputes involving no loss of time. There were no African strikes of any importance during the year, but there were ninety-two minor strikes involving the loss of 22,422 man-days. Of these only eight lasted for four days or over—seventy-two had a duration of one or less days. Eleven disputes were referred to formal conciliation. The wage dispute between the copper mining companies and the Northern Rhodesia African Mineworkers' Trade Union which had led to a strike in November, 1952, was finally resolved by arbitration, the award resulting in substantial wage increases especially for the lower-paid Africans. A long-standing dispute between the Northern Rhodesia African Shop Assistants' Trade Union and the Associated Chambers of Commerce and Industry over a wage claim was resolved early in the year by an arbitration award giving wage increases of between 20 per cent. and 60 per cent. to shop assistants and 12½ per cent. to piece-work tailors.

During the year the report of the commission appointed to advise on salaries and conditions of service for the European and African Civil Service was accepted subject to certain modifications by Government and the new salary scales were implemented retrospectively from the 1st October, 1951.

Works committees continued to serve a useful purpose in the larger Government departments and also in certain of the larger industrial undertakings where organised trade union representation was lacking. During the year legislation was passed allowing for the establishment of wages councils and by the end of the year councils for the hotel and catering trade and for Africans employed in the retail trade in the Eastern Province had been approved in principle.

INDUSTRIAL TRAINING

Many of the larger employers of labour as well as Government departments provided training for certain African employees such as clerks, hospital orderlies, post and telegraphs clerks, bricklayers and supervisors in the mining industry. There were seventeen trade schools throughout the Territory with a total attendance of 980 students. Evening classes were continued by the African Education

Department for African bricklayers and carpenters, but attendance was generally disappointing. In addition there was a comprehensive system of apprenticeship for Europeans, based on an Ordinance and supervised by officers of the Department of Labour and Mines. There were 260 apprentices in training at the end of the year.

At each of the four mines full-time training staff, European and African, were employed to instruct employees. New recruits to the industry before being posted to their job were sent to the schools where they received training in the use of tools, methods of operation, etc. Training within industry was given on the mines to improve efficiency and to prepare European employees for promotion. The instructors were trained in the United Kingdom in job instruction, job relations and job methods.

Chapter 3: Public Finance and Taxation

Northern Rhodesia's estimated total revenue for the year 1953 was in the region of £31,000,000, an increase of about £5,000,000 over the actual revenue for the previous year. The buoyancy of the revenue reflected the continued prosperity of the Territory and particularly of the copper mining industry. It is of interest to note in this connection that of the increase of revenue, more than £3,000,000 was accounted for by the greater return from income tax.

The estimated expenditure for 1953 (excluding expenditure from the Development Fund) was approximately £31,100,000, an increase of £6,400,000 over 1952. The main feature of this expenditure was the provision of a total of more than £12,000,000 for appropriations, of nearly £365,000 for loans, and of about £3,300,000 for various items of a capital nature. Appropriations included £5,500,000 to the Development Fund to be used for the construction of capital works under the Ten-Year Development Plan; £750,000 to the Land Bank; £2,000,000 to the Rhodesia Railways; £1,000,000 to the Local Authorities Loans Board; £500,000 to the Ndola Power Scheme; and £100,000 as a special military contribution. Provision was made for a substantial measure of expansion in all the social service departments, as well as in the Posts and Telegraphs, Police, Surveys and Land, Agriculture and Water Development Departments. Thus not only was a considerable amount of capital expenditure financed from recurrent revenue, which in less prosperous circumstances would of necessity have been financed from loans, but provision was also made for a large measure of departmental expansion, designed to improve the amenities of the Territory and develop its resources.

Expenditure from the Development Fund was estimated to amount to approximately £6,000,000, which was used in the main to finance capital works throughout the Territory in accordance with the Territorial Ten-Year Development Plan.

Tables showing the statements of revenue and expenditure of the past six years are at Appendix IV.

CUSTOMS TARIFF

The Customs Tariff of Northern Rhodesia provides for two rates of duty (i) general rates and (ii) preferential and Congo Basin rates.

Approximately one-third of Northern Rhodesia (the north-eastern portion) lies within the conventional boundaries of the Congo Basin and is subject to the Congo Basin Treaties under which the granting

of preferential treatment to goods of any particular country is prohibited. Goods of Empire and foreign origin are admitted into this area at the lower or preferential rates. The Congo Basin area falls outside the scope of the customs agreements mentioned below.

The tariff rates have remained substantially unchanged since 1938 although the wording of the various items has been revised to conform with present day requirements. Provision is made for specific rates of duty on practically all foodstuffs, and on beer, potable spirits, tobacco, cement, coal and coke, candles, lubricating oils, paraffin, tyres and tubes, matches and blasting compounds. Other articles are subject to *ad valorem* duties on an f.o.b. value basis or are admitted duty free.

In November, 1947, the customs import duties on many important items, notably essential foodstuffs, blankets, carpets, clothing, piece goods, footwear and household requisites, were suspended in an endeavour to provide some relief against the rising cost of living.

The customs agreements concluded with the Union of South Africa (1930) and Southern Rhodesia (1933) have in the main remained unchanged. They provide for inter-Government transfers of customs duties on goods imported into one territory and subsequently removed to the other. Goods of local production or manufacture, with the exception of certain articles which are subject to customs duty at specially rebated rates, are interchanged without restriction and inter-Government payments on an *ad valorem* basis are made.

EXCISE AND STAMP DUTIES

Excise duty is leviable on spirits, sugar, playing-cards, ale, beer, stout, wine, matches and tobacco manufactured in the Territory. An additional excise duty is paid on cigarettes by means of surtax stamps affixed to the containers. This stamp duty is also applied to all imported cigarettes.

NATIVE TAX

The rates of annual tax vary from 6s. in the remotest rural areas to 17s. 6d. in the mining districts. The rate was based, in 1938, on the estimated average earning capacity of adult males in each area and not on an individual basis. Since then, despite a rise in the earnings of the average African, no increase in the native tax has been made in the rural areas, and it has been decided to provide for increased taxation by levies imposed by the native authorities, who would thus have larger funds and be able to take on increased responsibilities. From the beginning of 1952 the rates in the urban areas were increased by 2s. 6d. Of this sum 1s. 6d. is paid to the native authority of the tax-

payer's home in lieu of his contribution to any levy which may be in force there, and 1s. is retained by the Government as a contribution towards welfare facilities in urban areas.

INCOME TAX

With the advent of federation, income tax will be levied on income accruing after the 31st March, 1953, under federal legislation. No information is at present available as to what form such legislation will take.

Subject to this proviso tax is levied on income accruing in or derived from Northern Rhodesia. Income earned during a twelve-month period ending on the 31st March is subject to tax during the following twelve months.

Deductions: Individuals

From total income the following deductions are allowed in arriving at chargeable income:

- (a) Personal deductions.—£700 for married persons and £350 for unmarried persons.
- (b) Deductions for children.—£150 in respect of each child.
- (c) Deduction for dependants.—The amount expended, with a maximum of £150 in respect of any one dependant, and further limited to the amount by which the dependant's income falls short of £300.
- (d) Insurance.—The annual premiums paid in respect of insurance on the lives of the taxpayer, his wife or minor children, or for sickness or accident are limited to one-sixth of the total income and further limited to £250.
- (e) Widows, or others similarly situated, who have custody of and maintain a child, receive the allowances and are taxed at the rates applicable to married persons.

Tables showing the rates of income tax and estate duty are given in Appendix III.

Chapter 4: Currency and Banking

Southern Rhodesia coin and currency notes issued by the Southern Rhodesia Currency Board are the only currency in circulation in Northern Rhodesia. The total amount of currency in circulation in any one of the three Central African territories of Northern Rhodesia, Southern Rhodesia and Nyasaland at any one time cannot be calculated with any certainty but it is estimated that the amount in circulation in Northern Rhodesia at the end of 1953 was £4,565,000, comprising notes valued at £3,865,000 and cupro-nickel coin valued at £700,000.

United Kingdom Currency

The quantity of gold coin in circulation is negligible. Silver coin is gradually being withdrawn and Bank of England and United Kingdom currency notes are no longer accepted. A rough estimate of the silver coin in circulation is £1,000.

Foreign Currency

Foreign currency is not legal tender and is not issued.

Other Territories

East African Currency Board notes and coin imported by Africans are accepted by the Government in small quantities and are exchanged at par for Southern Rhodesia notes and coin collected in Tanganyika. Silver coin of the Union of South Africa is accepted by the Government from Africans and repatriated at Government expense.

Commercial Banks

The Standard Bank of South Africa Limited and Barclays Bank (Dominion, Colonial and Overseas) have not issued currency notes since 1940. As from the 1st January, 1954, these notes, of which there are very few in circulation, will cease to be legal tender.

BANKING

Barclays Bank (Dominion, Colonial and Overseas), with ten branches and one agency, and the Standard Bank of South Africa Limited, with ten branches and two agencies, conduct the banking business of Northern Rhodesia. Savings facilities are provided by the Post Office Savings Bank which has fifty-five branches throughout the Territory.

The Barclays Overseas Development Corporation and the Standard Bank Finance and Development Corporation, subsidiaries of Barclays Bank (Dominion, Colonial and Overseas) and the Standard Bank of South Africa Limited respectively, provide finance of a medium-term character for purposes of agricultural and industrial development and loans to local government bodies of a type which a commercial bank cannot be expected to undertake; in certain circumstances they are prepared to consider applications for long- and short-term loans as well.

The Land Bank started operations during 1953. All loans previously made to farmers by the Land Board were taken over by the Land Bank, which, operating on business lines, continues to make short- and long-term loans to farmers and agricultural societies against various forms of security.

The Northern Rhodesia Industrial Loans Board, financed by the Government, assists industry by providing loans for capital development in cases where other means of assistance are not available on reasonable terms. The terms of reference of the Board enable it to assist industry (the word "industry" to include all forms of production and processing, but not the farming industry, for which financial assistance is provided under other arrangements) with capital for varying purposes of development including the financing of fixed assets, the installation of new or labour-saving plant and equipment and the provision of working capital. During 1953 loans totalling £333,500 were approved, bringing the total loans granted by the Board since its inception to £511,200. Assistance given during the year included loans to enterprises concerned with the production of bricks, roofing and sheet metal, the baking and confectionery trade, glass processing, diamond drilling, precision grinding and allied branches of engineering, and to a number of other undertakings.

POST OFFICE SAVINGS BANK

Savings bank facilities were extended to Bancroft, Chibuluma, Kalinku and Namushakende during the year, bringing the number of post offices conducting savings bank business to fifty-five. The number of depositors increased from 34,019 to 37,187, new accounts registered being 5,927, whilst 2,759 accounts were closed. Interest was increased to 3 per cent. on the 1st November.

The decline in deposits which featured the 1952 figures continued until September, after which there was a satisfactory improvement.

Transactions compared with those for 1952 are as follows:

				1952	1953
<i>Deposits:</i>					
Number	.	.	.	49,981	48,055
Amount	.	.	.	£489,031	£527,286
<i>Withdrawals:</i>					
Number	.	.	.	32,108	30,397
Amount	.	.	.	£463,466	£433,807

It is estimated that the balance due to depositors at the 31st December, 1953, will be approximately £1,166,970.

War Savings Certificates

During the year 53,313 units, representing a purchase value of £39,984 15s., were redeemed. Interest totalled £14,196 19s. 6d.

Chapter 5: Commerce

The year 1953 was another record year in Northern Rhodesia's external trade, imports rising by £9,000,000 to £51,833,000 and exports (including re-exports) by £12,250,000 to £94,833,000. The favourable visible balance of trade, therefore, has reached the unprecedented figure of £43,000,000, an increase of over £3,000,000 on that of 1952.

The Territory's export trade was again dominated by copper which represented 91 per cent. of the total exports in 1953. Metals, which include copper, lead and zinc, formed 96 per cent. of total exports.

The United Kingdom again provided the greatest volume of trade, taking up 36.5 per cent. of total imports and 60.3 per cent. of total exports, compared with 36.4 per cent. and 69.2 per cent. respectively in 1952. The proportion of exports going to the U.S.A. increased from 6.2 per cent. in 1952 to 18.7 per cent. in 1953.

Imports from non-sterling countries dropped by a little over £250,000 during 1953, while exports increased by nearly £14,500,000. The Territory's favourable visible balance of trade with non-sterling countries increased from £9,136,000 in 1952 to £23,754,000 in 1953. Some £15,500,000 of this favourable balance arose from trade with the United States and Canada.

Imported goods were largely distributed through European, Asian and African retailers, who are also direct importers. A few wholesale houses established in the Territory serve branch shops belonging to their group of companies and other retailers, including numerous African shops in outlying areas. Considerable use is made of wholesalers in Southern Rhodesia and the Union of South Africa and endeavours are being made to interest wholesalers in establishing their businesses in Northern Rhodesia. The Department of Trade, Transport and Industry is the sole importer and distributor of wheat, flour, butter and cheese.

The Department of Trade, Transport and Industry provides the channel of communication between the commercial and industrial communities and the Government. The Director of the department is chairman of the Board of Commerce and Industry and a member of his staff acts as United Kingdom Trade Correspondent in Northern Rhodesia on behalf of the United Kingdom Board of Trade.

The Northern Rhodesia Government is represented in the Union of South Africa by a Supplies Representative, Mr. F. H. Lowe, O.B.E., whose office is at 707 Garlick House, 26 Harrison Street, Johannesburg. In London the Government is represented by the Commissioner for Northern Rhodesia, Mr. J. H. Wallace, whose office is at 57 Haymarket, S.W.1.

Annexure V shows the details of trade in the Territory during 1953.

CO-OPERATIVE SOCIETIES

The year 1953 was a record year for the production of ground-nuts, maize and certain less important crops such as finger millet and kaffir-corn.

The agricultural societies (producer) have greatly strengthened their position, and have taken the opportunity afforded by an excellent growing season to extend their activities. This is particularly true of those with African membership.

The consumer movement is still going through a difficult time, adequate efficient management staff being its main deficiency.

Figures to illustrate co-operative society activities in the Territory are as follows:

<i>Type</i>	<i>No.</i>	<i>Member- ship</i>	<i>Share capital on savings deposits</i>	<i>1953 Turnover</i>
			£	£
Credit or loan	12	624	19,800	—
Consumer supply	24	5,476	130,760	459,413
Producer marketing	68	9,235	171,236	1,698,905
Other	5	850	3,243	9,001
	<u>109</u>	<u>16,185</u>	<u>£325,039</u>	<u>£2,167,319</u>

The Registrar of Co-operative Societies is also the Registrar of Building Societies; two building societies are established at present in the Territory, and their assets were at 31st December, 1953, £2,236,026 (compared with £1,602,971 in the previous year) and £74,468 (compared with £33,162 in the previous year).

PRICE CONTROL

Due to the general increase in production and to the easier availability of consumer goods throughout Northern Rhodesia, it was possible during the year to remove price control from a number of items. Goods over which control was relaxed include blankets, fabrics, tobacco, bicycles, footwear, hardware, tools, building materials, etc. Several items of groceries and clothing were also removed from control.

As a result of increases in the producer price of African and European cattle, coupled with increased rates on the Rhodesia Railways, it was necessary to increase the retail price of meat.

The Price Controller (in his capacity of Rent Controller) and his staff of inspectors continued to control the rents of existing properties and of new buildings.

Relations between Commerce and the Price Control Department remained cordial, and liaison was maintained with the Associated Chambers of Commerce and Industry.

COMPANY REGISTRATIONS

The total number of new companies registered in Northern Rhodesia in 1953 again constituted a record. Of the 148 registered, 111 were local and thirty-seven foreign, and the total capital involved amounted to over £7.4m.

Among the new registrations were two copper mining companies, sixteen engineering companies, seventeen general merchants and agents, seventeen builders and contractors and ten manufacturers and merchants of building materials.

MORTGAGES AND BILLS OF SALE

There were eight bills of sale valued at £9,894 registered during 1953 as against eleven bills valued at £17,898 in 1952.

Six hundred and six mortgages were registered during 1953, representing security for £1,972,233 8s. 5d., against 583 in 1952, representing security for £1,945,847.

INSOLVENCIES

Fifteen receiving and administration orders were made in 1953 compared with twelve in the previous year.

The bankrupts were all Europeans, either individuals or firms, and comprised six paid employees, four building contractors, two traders, three farmers and one hotelier.

The lack of business acumen and experience of those who were self-employed were primarily responsible for the insolvencies.

Chapter 6: Production

AGRICULTURE

The 1952-1953 season, while not without its problems for farmers in some areas, was favourable on the whole and produced record crops of maize, ground-nuts and rice, and a tobacco crop well above average. European farmers delivered over 60,000 short tons of maize to the Maize Control Board, while the surplus African crop totalled over 43,000 tons from the Central and Southern Provinces and 13,000 tons in the Eastern Province. The producer price was raised to 40s. 9d. per bag of 200 lb. net weight delivered to line-of-rail depots. The trend of production is shown in the following table:

MAIZE PRODUCTION FOR SALE
(Tons of 2,000 lb.)

<i>Year</i>	<i>European</i>	<i>African</i>	<i>Total</i>
1945 . . .	27,300	20,200	47,500
1946 . . .	26,800	17,200	44,000
1947 . . .	19,000	5,400	24,400
1948 . . .	34,300	29,600	63,900
1949 . . .	28,272	5,638	33,910
1950 . . .	45,082	37,676	82,758
1951 . . .	39,945	28,972	68,917
1952 . . .	38,970	27,374	66,344
1953 . . .	60,234	56,477	116,711

For the first time for many years territorial production has equalled consumption. Although weather conditions largely determine crop yields, the use of top dressings of nitrogen for maize is likely to result in a permanent increase in the level of production.

Wheat production has dropped to negligible proportions, while consumption continues to rise. In spite of an attractive price—65s. per bag of 200 lb. net—interest has declined in favour of maize production.

African food crops were everywhere adequate, and important surpluses of rice and ground-nuts were produced. Rice for sale from Barotseland and the Eastern Province totalled approximately 220 tons; steps are being taken to improve the quality by introducing more suitable varieties and better processing. The response to the drive to increase ground-nut production has been successful, particularly in the Eastern Province which produced a total of 2,500 tons of kernels. The market for ground-nuts appears to be smaller than expected and it is doubtful whether the attractive price of £50 per ton can be maintained in the future.

The pilot sugar scheme, on the north bank of the Zambezi River near Chirundu, is developing according to plan; the initial planting is being expanded to 300 acres covering representative soil types. Soil survey sounds a cautious note regarding full-scale expansion and future plans will be decided upon the results of current plantings.

Cotton attracts a few European farmers on the line of rail, although conditions are marginal on the plateau and the season under review was not very favourable. Fifty-seven growers sent away 133,000 lb. to the ginneries at Gatooma in Southern Rhodesia, which is about half the size of the previous year's crop. African production in the Luangwa Valley increased to 99,000 lb. of seed cotton, which was ginned in the Fort Jameson District and exported through Nyasaland.

Tobacco farmers enjoyed a better season, although prices were again disappointing. Registered growers of flue-cured Virginia were reduced in number in the Eastern Area from 203 to 135, and in the Western Area from 304 to 267, and the acreage declined accordingly. Nevertheless the total crop exceeded 10,000,000 lb. The eastern crop of 3,500,000 lb. was sold over the Salisbury auction floors for the first time and realised an average price of 27.37*d.* per lb.; the crop from the Western Area totalled 6,750,000 lb. and fetched an average price of 34.92*d.* per lb.

The production of Burley tobacco in the Eastern Province declined further to a total of 106,557 lb. which was sold over the Limbe floors for an average price of 29.56*d.* per lb. It is hoped to revive interest in this valuable cash crop which is largely African grown. Interest in Turkish tobacco has remained unaltered with a total production of 30,356 lb.

TOBACCO PRODUCTION

<i>Season</i>	<i>Flue-cured Virginia lb.</i>	<i>Other Virginia lb.</i>	<i>Burley lb.</i>	<i>Turkish lb.</i>	<i>Total lb.</i>
1946-47 .	3,428,662	82,000	125,000	1,026,500	4,662,162
1947-48 .	3,769,500	40,000	140,000	585,600	4,535,100
1948-49 .	5,767,887	40,000	178,767	97,000	6,083,654
1949-50 .	6,170,500	42,500	327,100	115 000	6,655,100
1950-51 .	10,676,351	50,000	252,879	49,368	11,028,598
1951-52 .	9,523,392	28,000	124,180	50,000	9,725,572
1952-53 .	10,323,538	20,000	106,557	30,356	10,480,451

A more favourable season generally has brought some relief to European farmers but labour shortage and rising costs of services and equipment make it difficult to carry out capital developments and to meet payments on loans at the same time. A commission of inquiry into the development of European agriculture was undertaken by Mr. L. G. Troup, O.B.E., from the United Kingdom, and his report, which is expected in April, 1954, is awaited with great interest.

The policy of the Department of Agriculture remains unchanged, namely to stabilise both European and African production in order to maintain a high level of rural prosperity combined with sustained production. Special attention has been given to regional conservation planning from aerial photographs, irrigation projects and land use surveys, with a view to securing sound development. Group farming and betterment schemes in African areas have made encouraging advances during the past year. The establishment of the Central Research Station near Lusaka has gone ahead fast; the chemistry and plant pathology laboratories are now in operation and an ecologist and pasture research officer have been added to the specialist staff during the year.

ANIMAL HEALTH AND PRODUCTION

Rainfall in 1953 was generally heavier than normal, and climatically the livestock industry enjoyed a favourable year. The African livestock population in particular continued to increase.

The steady growth of the European population maintained the demand for beef at a high level, and importation of slaughter cattle from Bechuanaland was as usual necessary to maintain supplies.

The Good Cattle Production Scheme in its revised form appeared to be attractive to farmers and the number of applicants under the scheme showed a sharp increase. There was a tendency for farmers to concentrate on smaller herds, rather than large ranches. The dairy industry continued to make steady progress under the stimulus of higher prices but there is still much scope for expansion.

The record of animal health for the year was marred by an extensive outbreak of foot-and-mouth disease. The disease first broke out in July, in the Namwala District, and by November had spread to the Mazabuka District. Control of the disease was effected by cordoning off infected areas, and inoculating all cattle in the area with live virus. Owing to the high invasiveness of the virus (S.A.T.1) in contrast to the virus of the previous outbreak in 1950 (S.A.T.2) greater difficulty than usual was experienced in containing the infection within the cordons. Some 200,000 cattle were involved, and at the end of the year inoculations were still in progress.

MANUFACTURING INDUSTRIES

Mining remains the main industry in Northern Rhodesia, but secondary industries are developing slowly. There already exist a cement factory, a brewery, two iron foundries, flour and maize mills, mills for the crushing of soil seeds, and factories for the production of soap, blankets, roofing tiles, pipes, steel windows and doors, furniture and bedding.

Sites for light and heavy industrial undertakings continued to be developed at most main towns. A heavy motor engineering firm started building its premises in the Territory and an existing heavy engineering firm was in the process of starting a nut and bolt factory. A firm started the production of terrazzo tiles.

The further development of manufacturing industries is still handicapped by the lack of raw materials and by high transport costs. The Kafue Hydro-Electric Scheme was approved by the Legislative Council during 1953 and this will assist the formation of a long-term policy on secondary industries.

COAL SUPPLIES

In 1953 Northern Rhodesia received 719,473 tons of coal compared with 665,310 tons in 1952. Because the copper mines could not get all they wanted they had to use large quantities of wood fuel and also, in order to maintain production, they arranged imports of coal from South Africa towards the end of the year. This coal was six times more expensive than coal from Wankie because owing to the limited capacity of the Mafeking line it had to be railed to Durban, shipped round the Cape to Lobito Bay and thence railed to the Copperbelt, a journey involving over 4,000 miles. Miscellaneous users of coal received approximately 65 per cent. of what they needed, but the average monthly despatches were 6,000 tons compared with 5,200 tons in 1952. Coal burning industries throughout the Territory were handicapped by the shortage of fuel. The table below gives comparative figures of coal supplied to Northern Rhodesia from the Wankie Colliery during the past three years:

	1953 <i>Tons</i>	1952 <i>Tons</i>	1951 <i>Tons</i>
Copper mining companies .	646,464	592,329	466,256
Miscellaneous users . . .	73,009 (a)	72,981 (a)	61,781
Total . . .	<u>719,473</u>	<u>665,310</u>	<u>528,037</u>

(a) This figure includes coal lent by the copper mining companies.

FISHERIES

The fishing industry maintains its importance in the life of many African communities, and it is indeed the backbone of the economy of several districts. This is particularly true of the Bangweulu and Mweru-Luapula areas: in the fisheries of the latter, which are shared with the Belgian Congo across the international boundary, there has been an awakening of the people's consciousness of their rights in this valuable heritage. Agreement was reached with the Belgian authorities on many aspects of the control of the fishery, plans for early development of Northern Rhodesia's share have been laid, and there is good reason to expect that expansion of the industry here will now go ahead.

In Lake Tanganyika, Northern Fisheries Limited have done useful exploratory work in the deep off-shore waters, being rewarded with some heavy catches. Towards the end of the year the legislature passed the Fisheries Development Ordinance, under which a board will be set up with the primary object of rationalising and expanding the fishing industry as a whole, with particular reference to the interests of the African populations which are so dependent on it.

Work on fish farming has continued as fast as is permitted by the biological processes with which the experimental work is mainly concerned. It is clear that high yields are possible; 2,000 to 4,000 lb. per acre per annum in correctly made and managed ponds is a safe estimate of yield. This gives an economic return, but several problems are still outstanding: how to improve the size of the fish which are small, usually less than $\frac{1}{2}$ lb. under conditions of high yield; how to make the best use of available feeds such as grass and greenstuff, which are eaten by one species of *Tilapia*, and so on. With the three experimental and demonstration fish farms, Chilanga, Fort Rosebery and Mwekera (Copperbelt), the last now approaching completion and each in different typical conditions of water supply and environment, sound foundations are being laid for progressive experiments in this most interesting potential industry. It is pleasant to record that many farmers, missions, and others are now themselves following up the lead, some with very encouraging prospects.

The full complement of the staff of the Northern Rhodesia-Nyasaland Joint Fisheries Research Organisation was made up during the year, and the team moved in September from Samfya to Nkata Bay on Lake Nyasa, from where it is to undertake a two-year survey of the lake.

FORESTRY

More than half the total area of Northern Rhodesia is covered by woodland. In the drier provinces in the south this woodland merges into savannah. In the north, however, and especially along the Congo-Zambezi watershed where the rainfall is fifty inches annually, the woodlands are tall and dense and approach the nature of forest. Only 6 per cent. of Northern Rhodesia is Crown land; the rest is native trust land or native reserve. Barely 3 per cent. of all this land has as yet been reserved for forestry. During 1953 the Forest Department directed as much of its manpower and resources as it could spare from the business of supplying wood and timber, to the work of locating and surveying more land for forest reserves. In the native areas it has not always been easy to persuade the local people that these forest reserves are necessary.

A shortage of coal for the copper mining industry continued during 1953 and about 14,000 acres of dense woodland were clear-felled to produce nearly three-quarters of a million tons of fuel-wood. The cutting was planned and supervised by the Forest Department in collaboration with the mining companies. It was carried out systematically and with close regard to the forest licence regulations. Although it would be difficult to maintain so large a programme of cutting for many more years, permanently harmful effects on the land were avoided. Bush fires were controlled and natural regrowth was secured on the cut-over areas.

Local supplies of sawn timber fell below the Territory's requirements and the value of imports of wood or wood products amounted in the year to nearly £2,000,000. Supplies of sawlogs in the neighbourhood of the mines are almost exhausted, but a fresh area of forests to the west of the Copperbelt has been located and made available from which the mines could obtain timber for another fifteen years. Further west in the Kasempa and Solwezi Districts other forest areas have been located but, although they are stocked with timber, they are too low yielding and too remote to be worked economically at present.

There are two principal sawmilling centres in Northern Rhodesia. The Rhodesian teak forests, 100 miles above the Victoria Falls, support two large sawmills and a furniture and a plywood factory at Livingstone. These are all operated by the Zambesi Sawmills and this firm felled and converted over 2,000,000 cubic feet of hardwood (*Baikiaea plurijuga*, "Rhodesian teak") during the year. There was a strong demand in Southern Africa for "Rhodesian teak" and for *Pterocarpus* (Mukwa) while some 30,000 cubic feet of Rhodesian teak flooring was exported to the United Kingdom. The other sawmilling centre is the Copperbelt where each of the four mining companies runs its own sawmill. Two private firms also operate smaller mills at Ndola—all fed from *Brachystegia* logs cut locally. The total cut of logs on the Copperbelt in 1953 was just under 1,500,000 cubic feet.

The department has continued its planting programme and tropical pine species from Mexico and the Far East (*Pinus pseudostrobus*, *P. leiophylla*, *P. montezumae* and *P. khasya*, *P. insularis* and *P. massoniana*) have done well near Ndola. At the principal plantation at Chichele this year over 280 acres were planted. Work was also started on permanent nurseries at four other centres.

MINING

The mineral rights, with certain exceptions, are owned by the British South Africa Company, but the company pays 20 per cent. of the net revenue from those rights to Government. Prospecting is under either an ordinary prospecting licence, valid for any part of the

Territory open to prospecting, or a grant of exclusive prospecting rights in respect of a specified area. Mining rights are acquired either by pegging and registering mining locations (claims), under a prospecting licence, or by "special grants" of mining rights from the British South Africa Company. Royalties are normally payable at the rate of 5 per cent. of the gross value of the minerals produced, but royalties on copper, lead and zinc are based on sliding scales, the rate increasing as the price of the metal increases.

The weight and value of the minerals produced were as follows:

	1953	Weight	Value £
Gold		3,329 oz.*	41,288*
Silver		473,126 oz.*	141,195*
Cobalt		7,895 cwt.	884,200
Cobalt Alloy (39.27 per cent. Co)		21,754 cwt.	953,072
Cobalt (other) (48.08 per cent. Co)		935 cwt.	48,366
Copper (blister)		210,061 tons	51,749,000*
Copper (concentrates) (21.66 per cent. Cu)		226 tons	11,848
Copper (electrolytic)		152,520 tons	38,263,875*
Copper (other)		71 tons	16,533*
Iron ore (59.85 per cent. Fe)		2,169 tons	2,169
Lead		11,510 tons	1,047,093
Manganese ore (38.82 per cent. Mn)		7,129 tons	39,824*
Selenium		46,320 lb.*	63,634*
Tin (concentrates) (70* per cent. Sn)		9.80 tons*	4,958*
Vanadium pentoxide		—	—
Zinc		25,330 tons	1,897,011
Beryl		5 tons*	690*
Limestone		231,570 tons	104,207
Mica (sheet)		16,439 lb.*	4,841*
Mica (waste)		—	—
Phyllite		2,789 tons	418
Silica rock		—	—
Total Value			£95,274,222*

* Subject to adjustment.

The total weight of copper produced (362,581 tons) is an all-time record for the Territory. It is thought that the 1953 production of copper was greater than the Chilean production. Thus Northern Rhodesia is now the second biggest producer of copper in the world, second only to the U.S.A. The manpower employed in the mining industries at the end of the year was 6,700 Europeans and 46,400 Africans. The numbers employed in base metal mining operations were 6,500 Europeans and 44,000 Africans.

MINING DEVELOPMENT

The existing mines continued to expand and prospecting activity both by companies and individuals increased during 1953. A new mining company, Bancroft Mines Limited, was incorporated in

Northern Rhodesia and commenced operations at the Bancroft Mine where two main shafts and two ventilation shafts were being sunk. The mine is scheduled to come into production early in 1957 and it is proposed to mine at the rate of approximately 150,000 tons of ore per month, which it is expected will result in the production of approximately 43,000 long tons of copper per annum. Work on the new Chibuluma Mine was progressing satisfactorily and it was hoped that it might be possible to begin production of copper during the latter half of 1955 instead of during 1956 as originally contemplated. Plans to develop Baluba ore-body, which contains 70,000,000 tons at 2.68 per cent. copper were temporarily shelved. During the year exploratory work continued at the old Kansanshi Copper Mines, the King Edward cupriferous pyrite occurrence and newly discovered pyrochlore occurrence. A new prospecting company, Mineral Search of Africa (Pvt.) Limited, obtained grants of exclusive prospecting rights over three areas and commenced prospecting in the second half of the year. The other main prospecting companies, Mwinilunga Mines Limited, Kadola Mines Limited, and Luapula Mines Limited, continued their prospecting operations.

All the mineral production except tin concentrates, beryl, mica and phyllite and some of the gold and limestone was by five large companies. All the cobalt, silver and selenium and nearly all the gold were recovered as by-products from one of the copper mines. All the iron ore and some of the manganese ore was used by the producers for metallurgical purposes and all of the copper concentrates was purchased locally for a similar purpose; some of the lead was used for debasing zinc and some of it was fabricated into pipes and sheets for use both at the producing mine and at other copper mines. Some lime was exported but most of the available limestone was used as a flux in copper smelting and, together with all the phyllite, for manufacturing cement. Otherwise all the minerals produced were exported to various parts of the world.

The production of copper, and hence also of cobalt, was again adversely affected by recurrent shortages of coal but fortunately not to the extent of the previous year.

The Mines Department is part of the Department of Labour and Mines. The mining, explosives, gold trading and factories laws are administered by the Chief Inspector of Mines, under whom there are four Inspectors of Mines and two Inspectors of Machinery, together with the appropriate clerical staff. To keep pace with mining developments every effort is being made to increase by two the number of Inspectors of Mines on the establishment.

Chapter 7: Social Services

EDUCATION

European Education

Education for Europeans is available at twenty-nine Government, two Government-aided and seven private schools. Except at Lusaka, where there are separate schools for boys and girls who have passed beyond the infants' range, the Government and Government-aided schools are all co-educational. The private schools are at convents intended primarily for girls but accepting a limited number of small boys.

Of the twenty-nine Government schools, two in Lusaka and five at the mining towns offer primary and secondary education up to and including Form V, the Overseas School Certificate examination being written at the end of the Form IV year. At one of these schools Form VI was offered in 1953 and the Overseas Higher School Certificate examination was written by Northern Rhodesia candidates for the first time. The range at Ndola School was extended to include Form IV and in 1954 the range at Livingstone School will be similarly extended. At some centres schools offer education only up to Standard 5, the top of the primary range, and at eight other centres there are small schools offering education up to and including Standard 2. Separate infants' schools have been established at Lusaka and at each of the five mining towns. Others, at Ndola and Livingstone, are projected.

Of the two Government-aided schools, that at Sakeji provides education up to Form II. The range at Eureka School, Kalomo, extends to Standard 5 only. With the exception of the Convent High School at Lusaka, which provides education up to Form IV, the range of education at private schools does not proceed beyond Form II.

For pupils who have completed the range offered at the smaller schools and for children living more than three miles from a day school, accommodation is available in the Government hostels at Lusaka, Fort Jameson, Choma (girls only) and Mazabuka (boys only). Privately managed hostels exist in connection with the Government schools at Silver Rest and Ndola. Accommodation for boarders is provided at

both the Government-aided schools (Sakeji and Kalomo) and at the Lusaka, Broken Hill and Ndola Convent Schools. At Government schools, tuition is free. Hostel fees are charged at the rate of £50 a year, but remission of these may be granted in the light of the means and family responsibilities of parents.

The Cadet Corps, contingents of which were organised at five centres in 1952, held a very successful first annual camp. The total combined establishment of the corps is approximately 600. A sixth contingent was formed late in the year at Chingola.

The number of children leaving the Territory for further secondary education at schools in Southern Rhodesia and the Union of South Africa continued to diminish in consequence of the implementation of the Government's decision, taken in 1947, to provide the full range of academic and modern secondary education within the Territory.

No university, teacher training or technical college/school facilities yet exist in Northern Rhodesia but scholarships, bursaries, grants and loans are available for suitable students who wish to take advantage of facilities elsewhere. The only adult education provided by Government is through classes for apprentices at the five mining and at two other centres in the Territory. Commercial subjects are offered at some Government and some private schools.

The Department of European Education is also responsible for Coloured and Asiatic education. There is a Coloured school (with boarding accommodation) at Fort Jameson, and for children who cannot attend this school, financial assistance is given to enable them to attend schools outside the Territory. Similar assistance is given to Indian pupils in instances where they are unable to attend one of the seven Indian schools in the Territory.

The following table shows the increase in the number of scholars enrolled in European schools over recent years:

<i>Year</i>	<i>Government schools</i>	<i>Aided schools</i>	<i>Private schools</i>	<i>Total</i>
1938 . . .	1,048	—	200	1,248
1948 . . .	3,147	24	886	4,057
1949 . . .	3,758	28	1,052	4,838
1950 . . .	4,748	32	1,141	5,921
1951 . . .	5,732	58	1,210	7,000
1952 . . .	6,766	57	1,400	8,223
1953 . . .	7,812	57	1,467	9,336

For Indian and Coloured schools, the corresponding figures are:

<i>Year</i>	<i>Government schools</i>	<i>Aided schools</i>	<i>Private schools</i>	<i>Total</i>
1938 . . .	—	—	—	—
1948 . . .	72	84	—	156
1949 . . .	80	128	—	208
1950 . . .	83	135	—	218
1951 . . .	92	216	—	308
1952 . . .	391	—	—	391
1953 . . .	492	—	—	492

African Education

In June the African Education Regulations (1953) were published. This enabled the appointment of the new local education authorities to proceed, and as a result these bodies will all be functioning effectively in 1954. The publication of the Unified African Teaching Service Regulations at the end of the year completed the administrative arrangements arising from the African Education Ordinance of 1951. It remains to implement these regulations in 1954.

The report of the Carr-Saunders Commission on Higher Education for Africans in Central Africa was published in March. Progress has been made with regard to the establishment of a university at Salisbury and it is planned to open arts and science faculties there for all races in January, 1956. Selection for admission will depend on merit and character and no quotas on a racial basis are to be laid down.

In primary schools the policy of consolidation was continued during 1952 as in recent years, the main efforts being directed towards getting a bigger proportion of the children enrolled in elementary schools to complete the basic four-year course which is considered the minimum necessary to give pupils any real benefit from school attendance, including permanent literacy. Girls' enrolment also has been encouraged in all possible ways.

The success of this policy over the past five years may be gauged from the fact that despite a decrease of over 14,000 pupils in sub-Standard A since 1948, the total enrolment in the four elementary classes has increased by more than 12,000. In 1948, for every four pupils in sub-Standard A there was only one in Standard II (the fourth year); in 1953 there was one in Standard II for every two in sub-Standard A.

The number of trained teachers reached 93 per cent. of the total teaching staff in maintained and assisted schools. In unaided schools the number of untrained teachers is relatively very much higher, and if all schools are considered together the proportion of such teachers is 12.6 per cent.

In March, 1953, there were 15,742 pupils in middle schools and 4,885 in upper schools, giving a total enrolment of 151,387 in all Government and aided primary schools. In May 1,320 school candidates passed the Standard VI School Leaving Certificate Examination; 103 of these were girls, an increase from fifty-eight in 1952. There were also sixty-eight successful external candidates out of 172 who entered, all of these being males.

Of these Standard VI successes, 230 boys and twenty-one girls entered junior secondary schools. Two new such schools were opened in July, and this fact accounts for some of the large increase of eighty-nine over the total junior secondary intake in 1952. In May 152 boys and three girls passed the Junior Secondary School Leaving Certificate Examination and seventy-nine boys passed on to the senior secondary section at Munali Secondary School, whose total roll, junior and senior, in August, 1953, reached 366. In December there were forty-seven candidates for the Cambridge Oversea School Certificate Examination as compared with twenty-nine in 1952; the results have not yet been published.

The training of teachers is undertaken at two Government and twenty-one mission institutions, and also at the new training centre at Mindolo which was opened in July and which will specialise in the training of teachers for urban schools. This institution comes under the ægis of the Provincial Education Authority, which grew out of the Special Area Education Authority established on the Copperbelt in 1952. In March, 1953, 609 men and 198 women were receiving training as teachers within the Territory.

Good progress is being made in expanding technical education. Seventeen of the twenty trades schools projected have been opened—an increase of three during the year—providing courses in bricklaying and plastering and in carpentry. Evening classes are available in these trades on the Copperbelt and at Lusaka for the benefit of workmen in employment who wish to take a trade test. More advanced technical courses, including a five-year course for instructors, are conducted at Hodgson Training Centre where the number of students is now 246, including thirty-seven instructors. A course for plumbers was started during the year. Special domestic science courses for girls are given at fourteen schools and the number of hospitals providing courses for African female nurses increased from three to four.

A good deal of vocational training is carried out under the ægis of other Government departments in such places as, for example, the three agricultural schools and the medical training school. The Provincial Administration conducts a school which provides courses in local government for chiefs, councillors and others concerned, and training for African clerks already in Government service is given at the clerical training school in Lusaka. It is estimated that nearly 1,000 Africans are being trained under these various schemes which are not included in the African Education Department's statistics.

Thirty-four Africans were taking advanced courses outside the Territory during the year with the aid of bursaries. Eight of these were granted bursaries from United Kingdom Colonial Development

and Welfare Funds for courses in the United Kingdom. In addition one student had an award from territorial funds in order to study architecture in Edinburgh. Of the other territorial bursary holders, six were at Makerere College in Uganda (four doing degree courses, one working for the diploma in education, and one studying art); ten were doing degree courses at Fort Hare University College in South Africa; two were taking the Advanced Agricultural Diploma course at Fort Hare and Fort Cox; there were two medical students at the University of Natal; one bursar was studying for a diploma in agriculture at Tsolo College; and lastly, four girls were at Tiger Kloof, two engaged on academic courses and two doing domestic science.

HEALTH

The Health Department's establishment provided for an increase over the previous year in practically all branches. Its administration remained as before with the Director of Medical Services as its head under the control of the Member for Health and Local Government. The work performed increased in variety and extent both on the curative and preventive sides.

Training of African staff, both male and female, was continued and plans are in hand to extend this work.

A brief description is given below of some of the more interesting aspects of the Health Department's work during 1953.

Sleeping Sickness

Investigations in the Mumbwa and adjacent areas have been carried on during the year and measures to deal with the problem are under consideration.

Venereal Disease

A new campaign on a voluntary basis and using penicillin treatment was started at Mankoya in the Barotseland Protectorate and has proved as popular as the campaigns elsewhere in the Territory.

Tuberculosis

The headquarters of the Tuberculosis Service was transferred from Lusaka to Broken Hill in January. A village settlement for African tuberculosics is now being planned near Broken Hill.

Leprosy

A Senior Medical Officer, who has been studying leprosy problems in Nigeria, will, on his return to Northern Rhodesia in 1954, control leprosy work in the Territory; he will be stationed at the Luapula Government Leprosy Settlement.

CAUSES OF DEATHS

Deaths amongst Europeans during 1953 were attributable to the following causes:

Diseases of the circulatory system	66
Violence (including accidents)	51
Diseases of the respiratory system	19
Cancer and other tumours	37
Diseases of the nervous system	15
Diseases peculiar to the first year of life (including fifteen stillbirths)	49
Diseases of the digestive system	13
Infective and parasitic diseases	10
Malaria	9
Other causes	36

SILICOSIS BUREAU

The continually expanding work of the Bureau ran smoothly throughout the year.

A summary of the work and findings of the Bureau during the year is as follows:

Total of persons examined	28,455
(Europeans, 3,833; Africans, 24,622)	
Total number of examinations	28,950
(Europeans, 3,929; Africans, 25,021)	
Total examined or re-examined for first engagement	8,095
(Europeans, 1,071; Africans, 7,024)	
Total accepted	7,368
(Europeans, 927; Africans, 6,441)	
Total rejected	727
(Europeans, 144; Africans, 583)	
Total post-mortem examinations	59
(Europeans, 8; Africans, 51)	
Total post-mortem examinations at which compensable disease was found	2
(Europeans—S., 1; T., nil; S plus T., nil)	
(Africans—S., nil; T., nil; S plus T., 1)	
<i>Note.</i> —Reports are still awaited on 1 European and 14 Africans.	
S = Silicosis T = Tuberculosis	
Total first certifications of silicosis alone	85
(Europeans, 15; Africans, 70)	
Total first certifications of tuberculosis alone	23
(Europeans, 2; Africans, 21)	
Total first certifications of silicosis with tuberculosis	4
(Europeans, 1; Africans, 3)	
Total of all first certifications of compensable disease	112
(Europeans, 18; Africans, 94)	
Persons previously certified who in 1953 were re-certified as having:	
Advanced in stage of silicosis	32
(Europeans, 7; Africans, 25)	
Tuberculosis added to previous silicosis	8
(Europeans, nil; Africans, 8)	
Silicosis added to previous tuberculosis	1
(Europeans, nil; Africans, 1)	
Total certifications of advance or complication	41
(Europeans, 7; Africans, 34)	

First certifications of persons whose only known exposure to risk of silicosis has been in Northern Rhodesia mines:	
Silicosis alone	65
(Europeans, 5; Africans, 60)	
Silicosis with tuberculosis	3
(Europeans, nil; Africans, 3)	
Tuberculosis alone	16
(Europeans, nil; Africans, 16)	

Average length of mining service of the 60 new (1953) African cases of silicosis with known exposure to risk in Northern Rhodesia only	<i>Months</i> 155.50
Average length of mining service of the 4 new (1953) European cases of silicosis with known exposure to risk in Northern Rhodesia only	222.75
Shortest exposure to risk productive of silicosis in any miner in this category	59.00

SOCIAL WELFARE

The Department of Welfare and Probation Services undertakes social welfare work among all communities, although the local authorities are responsible in their areas for social work among Africans, being grant-aided by the Government for this purpose through the department. The Government social welfare staff for their part do direct work among non-Africans.

A central committee was set up during the year to deal with applications for assistance in regard to education, health, old age and destitution among non-Africans. Government assistance to Africans is made through the officers of the Provincial Administration. A sum of £46,000 was paid out to aged persons in 1953, and needy persons were helped to the extent of £16,000. Several local authorities built flats and houses during the year for aged persons living in their areas, and the Government, where it is necessary, provides a rent subsidy for such persons.

Accommodation for aged men and destitutes is provided at a home which is run by the Salvation Army on behalf of the Government. Elderly women are provided for by a block of flatlets built and administered by the Federation of Women's Institutes.

Some children in need of care are provided for in two Government homes, and others are placed in institutions and boarding schools in Southern Rhodesia and South Africa. The Government spent £9,000 in maintaining neglected children during the year.

The Northern Rhodesia Society for the Blind, which was set up in 1952, opened a blind school and teacher training centre at Bwana Mkubwa. In addition to £15,000 granted by the Government to the society, generous grants were made by a number of bodies and the general public. There are now three blind schools in the Territory, two of which are run by missions, which are grant-aided by the Government.

To meet the demand of expanding social welfare services among Africans, a training centre for African social workers was opened at Mindolo. It is proposed to run a two-year course for prospective recruits as well as refresher courses for those already in this type of work. The first of the latter courses was run toward the end of 1953.

A Juveniles Ordinance and a Probation of Offenders Ordinance came into force during the year. The former makes provision for the care and protection of juveniles and the treatment of juvenile offenders up to the age of nineteen years; the latter Ordinance grants to the courts the power to place juvenile and adult offenders on probation.

In addition to those already mentioned the Government makes grants to a number of voluntary bodies who are concerned mainly with the care of children or are engaged in youth work. The number of applications for such grants has increased this year, indicating increased interest in voluntary social work.

Chapter 8: Legislation

Seventy-two Ordinances were enacted during 1953, the majority of which represented minor amendments to existing legislation, but special mention should be made of the following:

The Defamation Ordinance consolidated the statute law of the United Kingdom relating to libel, other than criminal libel, which was hitherto applicable to the Territory by virtue of Article 27 of the Northern Rhodesia Orders in Council, 1924 to 1951, and to amend that law by the incorporation therein of the substantive provisions of the Defamation Act, 1952, of the United Kingdom Parliament.

The Fisheries Development Ordinance which was enacted to implement the recommendations of the Fisheries Advisory Committee, but which has not yet been brought into force, established a Fisheries Development Board charged with the task of co-ordinating, assisting and controlling the development and exploitation of the fisheries of the Territory.

The Juveniles Ordinance replaces the Juvenile Offenders Ordinance and deals comprehensively both with all aspects, other than adoption, of the protections and welfare of juveniles and with juvenile delinquency. The Ordinance divides juveniles into two classes, namely, juveniles in need of care and juvenile delinquents. The latter class will continue to be dealt with by magistrates sitting as juvenile courts, whereas the former class will be dealt with by special courts consisting of a chairman with other persons to assist and advise him. In addition the Ordinance deals with the control of foster parents, the prevention of offences against juveniles, the control of entertainments by and for juveniles, and the establishment and conduct of approved schools and reformatories.

The Northern Rhodesia Territorial Force Ordinance was enacted but not brought into force during the year, and provides for the establishment of a Territorial Army Force for the defence of the Territory.

The Noxious Weeds Ordinance gives power to prescribe plants as noxious weeds and provides for the inspection of land and the eradication of noxious weeds found thereon.

The Victoria Falls Trust Ordinance was enacted but not brought into force during the year, pending the necessary administrative arrangements being made, and provides for the constitution of the Victoria Falls Trust and makes the trust the body responsible for the control, preservation and development of the Victoria Falls area, the control of which was previously vested in a committee appointed by the Ancient Monuments Commission.

Chapter 9: Justice, Police and Prisons

The courts administering justice are the High Court, the Subordinate Courts and the Native Courts. The High Court consists of a Chief Justice and two Puisne Judges, and, within the limitations of the High Court Ordinance, has the jurisdiction and powers of the High Court of Justice in England. The High Court buildings, including the High Court Registry, are at Livingstone, which is still the judicial headquarters of the Territory. The Puisne Judges are stationed where there is a District Registry, in order to facilitate the administration of judicial work there. In addition to Livingstone and Ndola, High Court Sessions are held periodically at Lusaka, Kasama, Fort Jameson and Mongu, and occasionally at various district headquarters on special circuit. Under the Mental Disorders Ordinance there has been vested in the High Court jurisdiction to administer and control the estates and property of patients under that Ordinance; and the Registrar of the High Court is to exercise the powers of the Master in Lunacy or of the Court of Protection in England. The Registrar of the High Court is also the Registrar of Patents and Trade Marks, Registrar-General of Births, Deaths and Marriages, and Sheriff of the Territory.

Subordinate to the High Court are the Magistrates' Courts created by the Subordinate Courts Ordinance. These are of four classes: Class I Courts being those of the Provincial Commissioners and Resident Magistrates, Class II Courts those of the District Commissioners, Class III Courts those of District Officers not in charge of a district, and Class IV those of such cadets in the Provincial Administration as are given judicial powers. At present there are Resident Magistrates at Ndola (two), Livingstone, Lusaka, Kitwe, Broken Hill and Fort Jameson. All these Subordinate Courts exercise criminal jurisdiction; Class I and II Courts can try all criminal offences though they require the High Court's permission to try treason, manslaughter or murder; Class III and IV Courts have restricted jurisdiction. All criminal cases tried by Subordinate Courts are liable to review by the High Court; and there is a limit, varying according to the class of the court, to the sentence which can be imposed without the confirmation of the High Court being required. Subordinate Courts, except Class IV Courts, have civil jurisdiction, limited according to the amount involved. Appeals, both civil and criminal, lie from the Subordinate Courts Class I and II to the High Court, and from the lower Subordinate Courts to the Provincial Commissioners' Courts.

The Native Courts are set up under the Native Courts Ordinance (for all the Territory except the Barotseland Protectorate) and the Barotse Native Courts Ordinance (for the Barotseland Protectorate). The courts are constituted in accordance with the native law and custom of the area in which the particular court is to have jurisdiction, and recognised under the Ordinances by warrant of the Governor, or of a Provincial Commissioner with the Governor's consent. The powers and jurisdiction of the court are normally set out in its warrant. Native Courts of Appeal may also be recognised. Except in the Barotseland Protectorate, in areas where there is a Native Court of Appeal, appeals from the Native Courts of first instance lie to that court, and from that to the local District Commissioner's Court. Where there is no Native Court of Appeal they lie to the local District Officer's Court, if any, otherwise to the District Commissioner's Court. There are further rights of appeal, from the District Officer's Court to the Provincial Commissioner's Court and from the District Commissioner's Court or Provincial Commissioner's Court to the High Court. In the Barotseland Protectorate, appeals lie to one or more Native Courts of Appeal, and thence to the Resident Commissioner's Court in criminal cases and to the High Court in civil cases. If there is no Native Court of Appeal they lie direct to those courts.

Southern Rhodesia, Northern Rhodesia and Nyasaland have established a joint Court of Appeal, known as the Rhodesia and Nyasaland Court of Appeal. Appeals, both civil and criminal, lie from the High Court of each territory to this Court of Appeal, though in many cases leave of the court is required for the appeal. The Rhodesia and Nyasaland Court of Appeal meets six times a year, in Salisbury, Bulawayo, Livingstone or Blantyre. In the case of civil appeals from Northern Rhodesia to the Rhodesia and Nyasaland Court of Appeal a further appeal lies to the Privy Council, either of right or with leave of the Court of Appeal. There is no corresponding provision for criminal appeals to the Privy Council, but a petition may always be presented to the Queen in Council for special leave to appeal.

The law administered in the High Court and Subordinate Courts is basically English law, being the common law, statute law and doctrines of equity in force in England on 17th August, 1911 (where not at variance with subsequent enactments), together with such later English statutes as have been applied to the Territory, certain Orders in Council and the Northern Rhodesia Proclamations and Ordinances. Practice and procedure are governed by the Criminal Procedure Code in criminal cases, and by the High Court and Subordinate Court Rules in civil cases; but subject to these the High Court and Subordinate Courts observe the practice and procedure for the time being in force in, respectively, the English Supreme Court of Justice and

the English Courts or Courts of Summary Jurisdiction. In cases in the High Court and Subordinate Courts where natives are involved, and in all Native Courts, native customary law is followed where it is not repugnant to justice or equity and not incompatible with local enactments.

POLICE

The authorised establishment of the Northern Rhodesia Police Force in 1953 was 344 European police officers and 2,530 African policemen. The establishment also included sixty-three European and fifty-eight African civilian employees. The European establishment comprised seventy-two superior police officers (i.e. officers of the rank of Assistant Superintendent and upwards) and 272 Senior Inspectors, Inspectors and Assistant Inspectors. The standard of literacy among African policemen continued to improve steadily and at the end of 1953 a total of 1,579 men had passed the Government Standard IV examination in English: of this number 334 had passed higher examinations. African constables can rise to the rank of African Inspector.

The headquarters of the Force is at Lusaka, although the headquarters of the Immigration Division remain at Livingstone, where the Police Training Depot is also situated. The transfer of the training depot to Lilayi, some nine miles from Lusaka, has not yet taken place although building works are progressing satisfactorily.

There are sixty-one police stations, sub-stations and posts in the Territory, not including divisional headquarters offices, the Mobile Unit and the Training Depot. The majority of police stations are in line-of-rail districts, but there are seventeen stations and five posts off the line of rail. In addition to the usual branches, including the band, the Force maintains a Mobile Unit. This is a self-contained and completely mobile body the primary purpose of which is to provide a reserve from which reinforcements can be drawn should the need arise in any part of the Territory.

The Northern Rhodesia Police Reserve was established in December, 1950. The Chief Commandant is a Senior Superintendent at Force Headquarters. The Reserve is a volunteer organisation and it corresponds to the organisation of the regular police. For purposes of administration, the Territory is divided into four Police Reserve divisions with a Divisional Commandant in charge of each; each division is subdivided into districts under the command of a District Commandant. There are twenty-two Reserve formations distributed throughout the Territory.

The increased industrialisation of the Territory, coupled with the growth of population in urban areas, has been followed by a progressive increase in recent years in the number of cases handled by the police, as the following comparative tables show:

<i>Year</i>	<i>Penal code offences</i>	<i>Statutory offences</i>	<i>Total all cases</i>
1945 . .	5,378	10,408	15,786
1946 . .	6,109	14,207	20,316
1947 . .	7,113	19,240	26,353
1948 . .	7,969	20,070	28,039
1949 . .	10,655	19,202	29,857
1950 . .	12,411	22,502	34,913
1951 . .	13,369	21,780	35,149
1952 . .	15,297	27,580	42,877
1953 . .	16,721	42,907	59,628

During the year under review, 47,083 persons were convicted in cases brought by the police. This figure represents an increase of 13,938 over the 1952 total. Five hundred and twenty-nine of the persons convicted were juveniles.

PRISON SERVICE

The Prison Service is under the control of the Commissioner of Prisons with headquarters at Livingstone.

There are thirty-nine prisons in the Territory, of which seven are under the direct supervision of European prison officers, four are controlled by police officers and the remainder by officers of the Provincial Administration.

There were 9,512 committals to prison during 1953, a decrease from 9,985 in 1952. The daily average population was 1,972 of whom 518 were detained in district prisons and 1,454 in central prisons. Of the former a daily average of 35.5 were detained in a camp attached to a district prison and of the latter a daily average of 484.26 were detained in camps attached to central prisons. There was a daily average of 15.85 European prisoners detained during 1953, compared with 16.28 for the previous year.

At all central prisons selected prisoners are instructed, under skilled supervision, in the following trades:

Carpentry	Bricklaying
Tailoring	Thatching
Shoe-repairing	Agriculture
Brick-making	

and arrangements have been made to trade test all African prisoners who qualify, before being discharged from prison.

The Prisoners' Aid Society reports that it is finding no difficulty in obtaining employment for discharged prisoners and considerable work has been done by this organisation during the year.

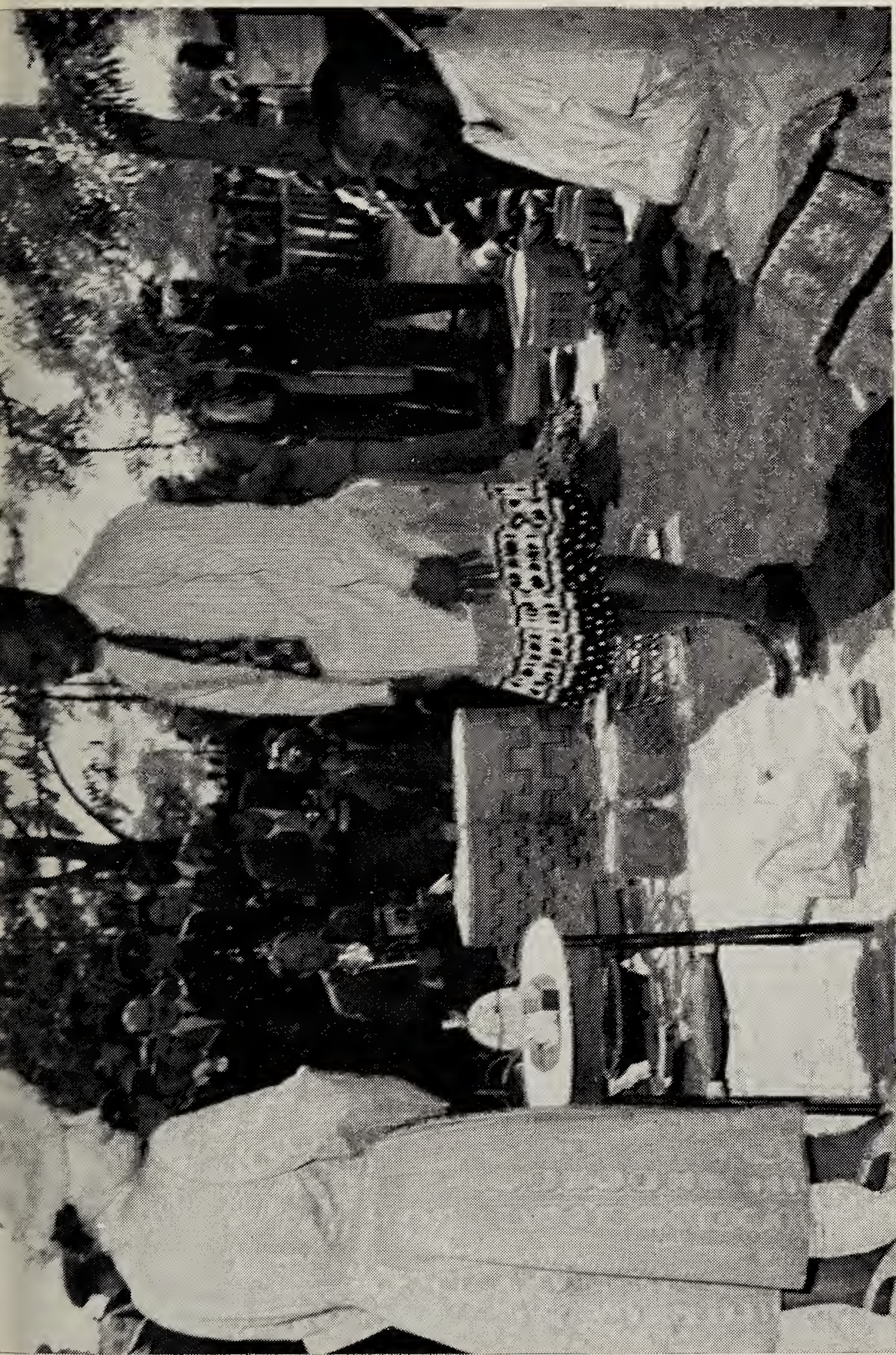
The Development Plan progresses well and the new prisons at Bwana Mkubwa, Broken Hill and Fort Jameson continue to be built by prison labour. A temporary camp was started some seven miles outside Mongu in the Barotse Province, and a camp was established on the new site at Kasama. A new site was approved for Livingstone and work will commence there in the near future.

Remission at present is on a basis of one-third of a sentence for first offenders and one-quarter for recidivists; but the question of adopting a uniform remission has been left for the Federal Authorities to decide as it is envisaged that the department will be under federal control as from the 1st July, 1954.

The progressive stage system continues to work satisfactorily.

A new Juveniles Ordinance became law during the year under review and the institution at Katambora was gazetted a reformatory. Thirty boys were sentenced for varying offences to this institution during 1953. Industrial training is being given in carpentry, tailoring and building, and academic instruction on a similar syllabus to that used by the Education Department up to Standard IV is also afforded to inmates.

A comprehensive building programme is well under way and it is hoped that the reformatory itself will be completed, with the use of reformatory labour, by the end of 1955.



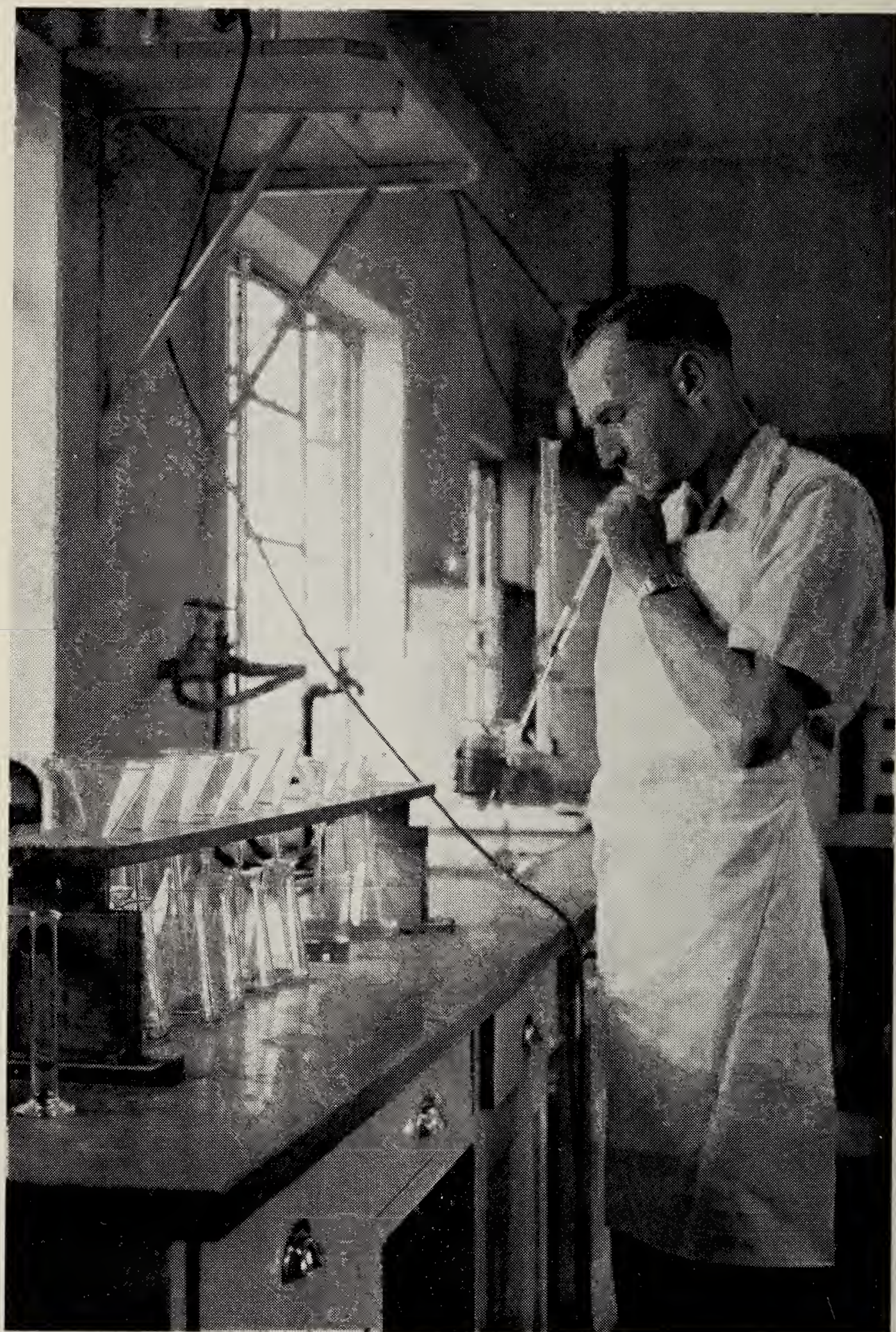
INDUNA LUYANGA OF BAROTSELAND PRESENTING A TABLE TO HER MAJESTY THE QUEEN MOTHER AT THE
RHODES CENTENARY EXHIBITION



THE CHILDREN'S WARD IN BROKEN HILL HOSPITAL



LORD LLEWELLIN, GOVERNOR-GENERAL OF THE FEDERATION, WITH PHILATELISTS AT
MUNALI SECONDARY SCHOOL, LUSAKA



IN THE LABORATORY OF THE COBALT PLANT AT NKANA MINE



CHIEF SHINDE OF THE LUNDA TRIBE, BALOVALE DISTRICT, WITH HIS HEADMEN



A VISITOR'S CAR ATTRACTS INTEREST AT THE VICTORIA FALLS



INSPECTING TOBACCO IN THE GRADING SHEDS AT LUSAKA



THE KUNDALILA FALLS IN SERENJE DISTRICT

Chapter 10: Public Utilities and Public Works

In towns other than Lusaka the provision of electricity and water is a municipal responsibility. Demands for both these services have continued to increase, and at Ndola a loan of £1m. has been made to the Municipal Council for an extension of the power station, and of this £ $\frac{1}{2}$ m. was drawn in 1953. In Livingstone the Victoria Falls Hydro-Electric Undertaking has continued to develop and expand. The increased demand has been greatest in Lusaka, where until recently both services were provided direct by Government. During 1953, however, the electricity undertaking was vested in a private limited liability company in which Government is the major shareholder. This company is continuing the large programme of expansion prepared and begun before it took charge. Similarly, Stage I of the new water supply scheme for Lusaka is nearing completion, and it is intended thereafter to hand over the scheme and future development to the local Municipal Council.

The total expenditure of the Public Works Department again increased and amounted to nearly £8m. Eight hundred Europeans and 12,000 Africans were employed. The supply of materials was generally satisfactory, but there were still shortages of both skilled and unskilled workmen. Building costs rose slightly.

BUILDINGS

Housing

(a) *European*: During the year 252 units of accommodation were completed. Two blocks of flats at Lusaka, and hostels at Lusaka, Fort Jameson, Ndola and Kitwe were under construction. The approximate expenditure during the year on this programme was £1,116,000.

(b) *Eurafrican*: Six houses have been constructed at Lusaka, and work is about to start on further houses at Ndola and Fort Jameson.

(c) *African*: There were 4,286 units completed, 1,780 were under construction, and another 623 were being planned. Expenditure amounted to approximately £1,018,000.

Health

African hospitals were completed at Choma and Balovale. An African hospital at Fort Rosebery; European cottage hospitals at Mazabuka and Choma; a mental ward at Kasama; a specialist block, a pharmacy, and central medical stores at Lusaka were all under construction. Tenders were invited for the first stage of a large hospital at Kitwe. Plans were being prepared for nurses' homes at Lusaka, Broken Hill and Ndola. Expenditure during the year was approximately £98,000.

Police

On the Copperbelt two mine sub-stations were completed and the construction of the Lilayi training depot near Lusaka made good progress. A number of stations were modernised and designs prepared for several new stations, including a central station at Lusaka. The approximate expenditure during the year amounted to £105,000.

Military

Repairs to the barracks at Bwana Mkubwa were finished and at Lusaka the new officers' mess was almost completed. Work was begun on construction of the new Military Cantonment at Munkulungwe near Bwana Mkubwa. The approximate expenditure during the year on this programme was £20,000.

Prisons

New prisons were being built departmentally at Fort Jameson and Broken Hill, together with a Borstal type of institution at Katambora, near Livingstone. Prisons at Mumbwa and Mankoya were being built by the Public Works Department and were nearing completion.

Education

(a) *European*: Forty-three classrooms with ancillary accommodation were built, of which nine were in prefabricated materials, while twenty-five additional classrooms were under construction. One hostel at Lusaka was extended and the construction of five new hostels was commenced. Satisfactory progress was made on the erection of the Lusaka Secondary Schools for boys and girls.

(b) *Indian*: Three schools were completed, and extensions to four schools were in hand.

(c) *Eurafrican*: Two dormitories were built at Fort Jameson and work commenced on a new school at Ndola.

The total expenditure for the year on these three programmes was approximately £511,000.

(d) *African*: From designs supplied by the Public Works Department the following were built by the African Education Department throughout the Territory:

83 Classrooms

19 Dormitories

78 African teachers' houses

3 Workshop blocks

The total expenditure during the year amounted to £176,731.

General Building Programme

In various parts of the Territory three wireless stations, extensions to three post offices, a customs office, two grain stores and eight Public Works Department depots were erected. Work was in progress on two rural post offices, eleven office blocks, one grain stores, two large stores and six Public Works Department depots. Among the projects in the planning stage were a general post office for Lusaka, ten office blocks, a transmitter station, a market and an abattoir. Expenditure amounted to approximately £310,000.

Maintenance

Expenditure continues to rise and amounted to approximately £126,000, an increase of 20 per cent. over 1952. In that year buildings to the value of £2,400,000 were taken over, but apart from this many old buildings have become expensive to maintain.

MECHANICAL

The Mechanical Branch which is responsible for the purchase, maintenance and repair of transport and plant has its main workshop at Lusaka where there is an area of nearly two acres of covered workshops. Smaller workshops have also been established at other centres in the Territory. About 200 Europeans and 700 Africans were employed. Nearly half a million pounds' worth of stock, mainly fast moving spares, was held.

An inspectorate section was established to undertake the periodical servicing and running adjustments of vehicles and plant, both static and in the field. The construction unit has installed nearly seventy static plants since 1948, including eight during 1953. Work commenced on a ferry pontoon programme and two pontoons were designed and fabricated. Thirty-two European plant operators were trained at the Plant School. The diesel laboratory was extended to undertake the testing of fuel and lubricating oils and greases.

The cost of operating all workshops amounted to approximately £325,000 and plant and vehicles to the value of over £800,000 were purchased. At the end of the year the Government transport fleet had increased to just over 2,000 vehicles, and there were nearly 1,200 items of plant. The total value of vehicles and plant is now in the region of £3,500,000.

WATER DEVELOPMENT AND IRRIGATION

The chief functions of the Water Development and Irrigation Department are the investigation and recording of the water supplies in the rivers and sub-strata of the Territory, together with the construction of hydraulic works designed to provide water for the inhabitants, their cattle and crops. These works take the form of dams, weirs, wells, boreholes and small irrigation channels. As the rainfall is seasonal, the dry months—from May to October—create a heavy demand in a large part of the Territory for water stored in reservoirs, while boreholes and open wells are relied on in areas where suitable water-bearing strata exist.

In 1953, 215 boreholes were drilled for Government or private purposes, at a cost of approximately £64,000. The selection of these sites was carried out by the department's geophysical and geological staff. In this period nine dams, four weirs and 171 wells were also constructed. Eight other dams and two wells were in the process of construction at the end of the year.

Irrigation—except for minor schemes from small reservoirs—has not, generally, been started and farming activity is mainly limited to crops which depend on the usually ample rains of the wet season. The normal rainfall of the Territory varies from twenty-five inches in the south to fifty-five inches in the north.

The steep slopes and the shallow soil-crust make the construction of irrigation terraces difficult and extremely expensive. The meagre population also renders the colonisation of large canal areas problematical. Local reservoir schemes to guarantee farmers a second crop are, however, becoming more popular.

A considerable part of the department's efforts is devoted to the provision of advice and assistance on European farmers' problems.

BUILDING CONTROL

Building control was abolished with effect from 1st January, 1953.

TELECOMMUNICATIONS

Telephone Exchanges

A telephone service was introduced at Kasama by means of the installation of a 100-line automatic exchange. The Choma and Fort Jameson exchanges were converted to automatic working, and work on converting the Mazabuka exchange was nearly completed. Extensions to the Broken Hill, Kitwe, Livingstone, Lusaka and Ndola automatic exchange systems were completed and extensive cable distribution systems were laid at these centres. Additional telephone cables were also laid at Choma and Chingola.

Farm Lines

Additional farm lines were connected to the Broken Hill and Fort Jameson exchanges and progress is well in hand in the erection of new lines in the Chisamba, Choma, Livingstone, Lusaka, Magoye, Mazabuka and Monze areas.

Trunk Routes

New trunk switchboards were installed at Kitwe and Ndola. Additional trunk switchboards were provided at Lusaka.

The direct route between Lusaka and Salisbury has been completed and provides two telephone speech circuits and twelve telegraph channels. Work was commenced on the laying of a main trunk cable between Livingstone and the Victoria Falls to link up with the Southern Rhodesia "very high frequency" system.

Two three-channel repeaters were installed at Choma.

The Fort Jameson-Nyasaland and Fort Jameson-Kazimuli trunks were completed and brought into service. A V.H.F. telephone link between Chingola and Bancroft was also brought into service.

The installation of equipment for the Copperbelt V.H.F. trunk system has been commenced.

Telegraphs

A six-channel system was installed between Kitwe and Ndola.

Teleprinter working was introduced between the following offices: Lusaka-Ndola, Lusaka-Salisbury, Ndola-Kitwe, Ndola-Luanshya, Ndola-Elisabethville (Belgian Congo).

Several teleprinter private wire circuits have been provided on the Kitwe-Ndola, Ndola-Lusaka and Lusaka-Salisbury systems. These include a Kitwe-Johannesburg and a Lusaka-Johannesburg circuit for the two principal copper mining groups.

The Pretoria-Ndola wireless telegraph circuit was converted to frequency shift keying teleprinter operation.

Stand-by radio equipment has been provided at all the main offices.

COMPARATIVE STATEMENT

TELECOMMUNICATIONS STATISTICS

			<i>Telegrams</i>	
			1952	1953
Forwarded	.	.	371,959	423,517
Received	.	.	361,518	417,820
Transmitted	.	.	572,020	609,898
Totals	.	.	<u>1,305,497</u>	<u>1,451,235</u>

TELECOMMUNICATIONS STATISTICS—*continued*

		<i>Telephone Trunk Calls</i>	
		1952	1953
Internal		632,079	634,409
External:			
Outgoing	39,704		43,806
Incoming	33,551		34,902
	<hr/>	73,255	<hr/>
			78,708
Totals		<hr/> 705,334 <hr/>	<hr/> 713,117 <hr/>

AFRICAN HOUSING

The Commissioner for Local Government is the officer responsible for administrative duties in connection with African housing in the local government areas. Under the Territory's Development Plan, the sum of £4,450,000 has been provided to build houses for Africans in towns and at district stations. The whole of this sum is being spent on permanent construction of detached, semi-detached and terraced housing.

From this sum approximately 17,000 houses will be built, of which 14,000 had been completed by the end of 1953, and the balance is in the course of construction. The greater part of the houses are to be handed over to local authorities for letting to the public and the balance to be retained by Government for housing its own African Civil Servants. The houses handed over to local authorities for letting to the public are against loans carrying interest at $3\frac{1}{2}$ per cent. and repayable over forty years.

The housing problem for Africans is mainly one of the urban areas to which industrial, mining and commercial expansion is attracting great numbers.

It is the aim to encourage the emergence of a stable African community in townships, living a family life in neighbourhood units and receiving adequate public services. Rents are usually subsidised by Government, particularly for families, and the system of subsidy is framed to remove any financial interest of the housing authority or the employer in the issue of whether any employee occupying a rented quarter is married or single.

Chapter 11: Communications

ROADS

Good progress was achieved with the development programme. Eighty-two miles of bituminous surfaced road (Class I) and 219 miles of gravel surfaced (Class II) were completed. Six firms of contractors and seven Public Works Department construction teams were engaged upon this work. Work was in hand on a further 101 miles of Class I and 413 of Class II roads. Another contract was let at the end of the year for the construction of seven miles of Class I and seventy-three miles of Class II roads.

Nine bridges of a total length of 428 feet were completed, and work was in hand on a further five bridges of a total length of 424 feet.

Expenditure on construction, improvement and maintenance amounted to nearly £1,400,000.

AERODROMES

The 6,600-foot long main runway at Ndola was reconstructed with bituminous surfacing to a standard capable of carrying single static wheel loads of 40,000 lb. The new airport at Mongu, the administrative headquarters of the Barotseland Protectorate, was also completed in brick surfacing. Expenditure totalled approximately £54,000.

CIVIL AVIATION

During 1953 air transport services showed a progressive increase in the number of passengers carried. This was largely due to the Coronation and the Rhodes Centenary Exhibition traffic. Apart from an increase in domestic and regional scheduled services, the year saw the introduction of tourist and coach class services from Central Africa to the United Kingdom. It is satisfactory that Central African Airways, despite the setback caused by the temporary grounding of the Corporation's fleet of Viking aircraft, were able to assist materially in meeting the heavy demand for air passages.

Operational

(a) *Central African Airways.* As a result of the revised Central African Airways programme introduced after the Viking accident in Tanganyika last March, it was necessary for Government to provide night flying facilities at both Lusaka and Ndola airports on each evening of the week up to the end of September.

(b) *Government Communications Flight.* On the 30th August the Government Rapide aircraft crash landed on a flight to Fort Jameson while en route to Nyasaland. The Government took delivery of two four-seater Auster Autocars. These machines are available for the use of all departments and the Members of the Legislative Council.

(c) *Royal Air Force Fighter Squadron Reinforcement Exercises.* In June a Royal Air Force Venom Fighter Squadron passed through Lusaka en route to Salisbury in connection with the Rhodes Centenary Celebrations.

Conferences

Delegates from Central Africa attended the International Civil Aviation Organisation's African Indian Ocean Second Regional Navigation Meeting held during November at Teneriffe. The conference aimed at achieving a high degree of standardisation of aeronautical practices and procedures between different States and an increase in air safety, navigation and meteorological facilities.

Private Flying

The increase in the number of private and flying club aircraft and in the number of new licences issued to pilots by the Department of Civil Aviation is shown by the following statistics:

Private Pilot's Licences

January	76
December	100
Increase in number of current licences	24
<i>Note.</i> —Up to December, 1953, the number of student pilot licences issued was	
	114

Aircraft Registered in Northern Rhodesia

January	22
December	28
Increase in number of aircraft registered	6

Communications

The general efficiency of navigation and radio aids has been increased, thereby providing a higher standard of safety for air services operating through the Territory.

Meteorological Service

The Northern Rhodesia Meteorological Service is a branch of the Department of Civil Aviation, with its headquarters at Livingstone. There is close association with the Meteorological Services of Southern Rhodesia and Nyasaland, the heads of the three territorial services forming an advisory committee and having as chairman the Director of Meteorological Services, Southern Rhodesia.

The Meteorological Service conforms with the International Civil Aviation Organisation and includes:

- (a) A main meteorological office at Livingstone Airport which also provides guidance for the remainder of the Territory;
- (b) A dependent meteorological office at Ndola Airport; and
- (c) Subsidiary meteorological offices at Lusaka Airport, and during the rainy season at Mongu and Kasama.

The facilities at the Livingstone Main Meteorological Office extended over twenty-four-hour periods. Lusaka was also called upon for night facilities.

Further valuable experience was gained throughout the year in the problems connected with the forecast requirements of "Comet" flights, and towards the end of the year the forecast officers at the Livingstone M.M.O. were able to make "Comet" familiarisation flights to Entebbe.

The Northern Rhodesia climatological and rainfall records and statistics were collected and analysed at Livingstone. Returns were received regularly and at the end of the year there were sixteen meteorological offices, twenty-one district stations and some 250 rainfall reporting stations. Although compiled in Northern Rhodesia, these records, together with those from Southern Rhodesia and Nyasaland, continued to be published in Salisbury for international distribution. Information was extracted for various Government departments, including Water Development and Irrigation, Forestry, Agriculture, Game and Tsetse Control, and Health, as well as various commercial undertakings and air surveys.

Aerodrome Development

The following projects were either completed or begun during 1953:

- (a) *Ndola Airport.* In 1952 a temporary runway was made for the purpose of taking traffic during the reconstruction of the main runway in the dry season of 1953. The new runway, together with an enlarged hard-standing for the parking of aircraft, was used for the first time early in October, 1953.
- (b) *Mongu Aerodrome.* The Mongu Aerodrome was finished early in the year and was opened for public use in March.
- (c) *Choma.* The present aerodrome at Choma is not adequate to meet present-day requirements. A site for a new aerodrome has recently been surveyed.

The following is a list of aerodromes established in Northern Rhodesia:

International Airports:

Livingstone, Lusaka, Kasama and Ndola.

Secondary Aerodromes:

Abercorn, Balovale, Broken Hill, Fort Jameson, Kalabo
Mankoya, Mongu, Mpika and Sesheke.

Emergency Landing Grounds:

Chingola, Chinsali, Chisamba, Choma, Fort Rosebery,
Fwaka, Isoka, Jembo, Kafue Hook, Kalomo, Kanona,
Kapiri Mposhi, Kasempa, Kawambwa, Luanshya,
Lukulu, Lundazi, Luwingu, Mazabuka, Mofu, Monze,
Mporokoso, Mufulira, Mumbwa, Munuka, Mwinilunga,
Namwala, Ndabala, Nkana, Nkeyema, Nyimba, Petauke,
Rosa, Rufunsa, Senanga and Shiwa Ngandu.

Air Services

The following air services were in operation by the end of 1953:

(a) *International Services:*

British Overseas Airways Corporation/South African Airways:

Entebbe-Livingstone-Johannesburg—four times weekly—
operated by “Comet” jet liner.

Johannesburg-Livingstone-Entebbe—four times weekly—
operated by “Comet” jet liner.

Air France:

Brazzaville-Livingstone-Tananarive — fortnightly — oper-
ated by D.C.4 aircraft.

Tananarive-Livingstone-Brazzaville — fortnightly — oper-
ated by D.C.4 aircraft.

(b) *Regional Services:*

Central African Airways Corporation:

Johannesburg-Salisbury-Lusaka-Ndola—daily each direc-
tion—operated by Viking aircraft.

Salisbury-Bulawayo-Livingstone-Lusaka-Ndola — three times weekly each direction—operated by Viking and Dakota aircraft.

Fort Jameson-Lilongwe-Blantyre—twice weekly each direction—operated by Beaver aircraft.

Salisbury - Lusaka - Ndola - Kasama - Abercorn - Nairobi — once weekly each direction—operated by Viking aircraft.

Salisbury-Lusaka-Ndola-Nairobi—daily each direction—operated by Viking aircraft.

Salisbury-Livingstone—once weekly excursion—operated by Viking aircraft.

(c) *Internal Services:*

Central African Airways Corporation:

Lusaka-Fort Jameson—twice weekly each direction—operated by Viking or Dakota aircraft.

Lusaka-Livingstone—three times weekly each direction—operated by Viking aircraft.

Lusaka - Mankoya - Mongu - Kalabo - Mongu - Senanga - Sesheke-Livingstone—twice weekly each direction—operated by Beaver aircraft.

Lusaka-Mongu-Balovale-Mongu-Sesheke-Livingstone—once weekly each direction—operated by Beaver aircraft.

Lusaka-Broken Hill and return—four times weekly—operated by Beaver aircraft.

SUMMARY OF AIRCRAFT MOVEMENTS
DURING 1953

	<i>Livingstone</i>	<i>Lusaka</i>	<i>Kasama</i>	<i>Ndola</i>
Aircraft movements .	4,371	6,970	504	3,877
Passengers set down .	13,563	15,793	420	11,505
Passengers uplifted .	13,632	15,218	588	10,898
Passengers in transit .	12,690	16,349	2,420	8,192
Mail set down—ks. .	48,422	49,602	3,166	461,537
Mail uplifted—ks. .	47,281	38,764	2,318	28,675
Freight set down—ks. .	60,221	148,120	6,380	2,051,150
Freight uplifted—ks. .	30,092	92,331	2,744	50,991

Federation

It is expected that by the 1st July, 1954, the Department of Civil Aviation, Northern Rhodesia, will be completely federated. Thereafter its administration will be under the control of the Federal Director of Civil Aviation.

TRANSPORT

The railway systems serving Northern Rhodesia continued to handle increasing amounts of traffic throughout the year. This was possible because new locomotives and rolling stock were put into service. The output of the Wankie Colliery, albeit restricted, was moved without difficulty. The port of Beira handled a record tonnage of 2,643,223 short harbour tons, which was 3.05 per cent. higher than the previous year's record. Phasing arrangements kept the port clear and prevented delays to shipping during the months when rain hindered the port work but this resulted in an accumulation of cargo for Beira awaiting shipment from ports in the United Kingdom. Northern Rhodesian importers continued to make only very limited use of the port of Lobito and the Lobito Railway, although both were in a position to handle more traffic had it been offered. Although the Rhodesia Railways had raised their rates and fares on 1st July, 1952, rising costs necessitated a further increase and in October, 1953, a surcharge of 10 per cent. was imposed.

POSTAL SERVICES

New post offices were established during the year at Mwanjawanthu, Kalinku, Sinda, Chadiza (Eastern Province), Senga Hill, Nsombo (Northern Province), Namushakende (Barotse Province), Kalulushi, Mine Club, Chingola, Bancroft (Western Province), Muzoka (Southern Province), Chipongwe, Kanona (Central Province). These additions brought the total number of post offices in the Territory to eighty-four.

There was a general increase in all types of post office business throughout the year.

The general expansion of business is clearly illustrated by the following comparisons. Of particular interest are the continued increases in the cash-on-delivery transactions with the Union of South Africa and the United Kingdom.

	1952		1953	
	<i>Number</i>	<i>Amount</i> £	<i>Number</i>	<i>Amount</i> £
Money Orders:				
Issued . . .	25,302	339,169	29,114	402,372
Paid . . .	12,417	154,218	15,191	198,129
Postal Orders:				
Issued . . .	494,876	402,030	613,425	536,789
Paid—				
British . . .	177,827	137,131	194,376	163,070
Union of South Africa	89,727	81,879	101,263	133,031

CASH ON DELIVERY

	1952		1953	
	<i>Number</i>	<i>Trade charge £</i>	<i>Number</i>	<i>Trade charge £</i>
Internal	1,221	3,994	1,363	3,597
External forwarded .	42	117	74	165
External received:				
Southern Rhodesia	8,431	19,531	7,671	19,428
South Africa .	13,392	38,306	24,844	78,788
United Kingdom .	4,304	27,912	10,720	66,619
Totals	<u>27,390</u>	<u>£89,860</u>	<u>44,672</u>	<u>£168,597</u>

Chapter 12: Press, Broadcasting, Films and Government Information Services

PRESS

There are four European newspapers published in Northern Rhodesia. The *Northern News* and the *Northern Rhodesia Advertiser* are published at Ndola, the *Central African Post* in Lusaka and the *Livingstone Mail* at Livingstone. The *Northern News* in 1953 became the first newspaper to appear daily. The list of newspapers and periodicals published within the Territory continues to grow. In the year under review the list was as follows:

Newspapers:

<i>The Northern News</i>	Daily
<i>The Central African Post</i>	Twice weekly
<i>The Livingstone Mail</i>	Twice weekly
<i>The Northern Rhodesia Advertiser</i>	Weekly
<i>The African Eagle</i> (African Newspaper)	Weekly

Periodicals:

<i>The Northern Rhodesia Farmers' Journal</i>	Monthly
<i>The Northern Rhodesia Scout</i>	Quarterly
<i>Progress</i> (Associated Chambers of Commerce and Industry)	Monthly
<i>Rhokana Review</i>	Monthly
<i>Mufulira Magazine</i>	Monthly
<i>Roan Antelope Magazine</i>	Monthly
<i>Nchanga Magazine</i>	Monthly
<i>The Salaried Staff and Mine Officials' Magazine</i>	Monthly
<i>The Eagle</i> (English Church Magazine)	Monthly
<i>The African Listener</i> (for African radio listeners, printed in English)	Monthly
<i>The Northern Rhodesia Journal</i>	Twice yearly

The first independent African newspaper *The African Eagle*, published by African Newspapers Ltd., Salisbury, replaced at the beginning of the year the Government-sponsored *Mutende*.

BROADCASTING

The Central African Broadcasting Station at Lusaka is operated by the Government Information Department. It broadcasts to Africans in the three Central African territories in six African languages and in English. The staff in 1953 consisted of the Broadcasting Officer, Assistant Broadcasting Officer, Broadcasting Engineer, Assistant Broadcasting Engineer, four Programme Assistants, two Maintenance Engineers, two Recording Engineers, six Technicians, Record Librarian, three Stenographers, thirteen African Broadcasters and a Eurafrican Mechanic. Three posts could not be filled because of housing shortage.

The station uses transmitters with powers of 15kW and $2\frac{1}{2}$ kW and reception throughout Central Africa has been satisfactory. The weekly broadcasting hours were maintained at seven hours each day. For two hours in the afternoon the programme consists of uninterrupted music on gramophone records, broadcast mainly for factory workers. A vernacular or simple English programme follows and the last hour is devoted to a programme in English directed at the more highly educated African. Many new feature programmes in English and the vernacular were broadcast during the year, and a large proportion of these dealt with development projects and instructional subjects. Development work in Barotseland; native treasuries in Northern Rhodesia; native councils in Southern Rhodesia; "Report on Africa", a picture of development in other African territories from Kenya to French West Africa; "The Brains Trust"; "Questions and Answers"; and "African Variety Show" were subjects which proved popular and ran for several months. The relay of the B.B.C. news was dropped during the year, listener research showing that comprehension of this bulletin was confined to a very few listeners and that, owing to the speed at which it was read, the news was often open to misinterpretation. A ten-minute bulletin of African news, read at a slower speed, was substituted.

Increasing pressure on building space made "live" broadcasts, except straight reading, very difficult to handle. Practically all programmes were, therefore, recorded, the number exceeding 6,000.

The main problem of listening continued to be the servicing of cheap receivers in rural areas. There was considerable improvement, however, in this facility towards the end of the year as a result of co-operation between the engineering section and the distributors of the "Saucepan" set. News of two cheap receivers for the African market, to be ready in 1954, was received during the year.

There was delay in beginning the erection of a new transmitting station outside the urban area. However plans and quantities were completed both for this undertaking, for alterations to the existing transmitter buildings to convert them to a new administrative block and for two new studios to be added. The new studio at Zomba was completed and brought into action to serve Nyasaland.

The Central African Broadcasting Station continued to supply material from the Territory for broadcasting by Salisbury Station to Europeans. Forty-five minutes of programmes were supplied every week, and a regular series, "District Notebook", replaced "Northern Viewpoint" which had run for three years. Two full plays were contributed to Salisbury and the regular weekly bulletin on sport was continued.

The Central African Broadcasting Station had a most eventful year and gave programmes on the Coronation, the Rhodes Centenary Exhibition, the Royal Tour of Southern Rhodesia and the implementation of Federation.

FILMS

The territorial news magazine, in 35 mm., "Northern Spotlight", continued in production until October when it was handed over to the Federal Film Unit. During the year eight editions of this news magazine were produced until it was succeeded by "Rhodesian Spotlight". Particular editions covered the Coronation celebrations in Northern Rhodesia, the Rhodes Centenary Exhibition during the Royal Visit and the Centenary Games. The production of short documentaries was limited, but one feature, "Guano Caves", was widely used on British television and numerous newsreels overseas.

The section, in the latter half of the year, was reorganised as a result of Federation and, on the production side, planned a series of short documentaries on peculiarly Northern Rhodesian subjects. Work on the first of these, "School in Copper", was begun in December.

The seven mobile cinema units continued in operation throughout the Territory, but it became apparent that a heavy replacement of vehicles and equipment was necessary to maintain a consistent service. Special circuits were used to show the Coronation film, "Elizabeth is Queen", to all rural areas immediately after the Coronation. Over 15,000 rural Africans saw this film in a period of two months, and shorter versions were shown in every point in the Territory.

The film library reached a record total of 1,400 titles and a record register of exhibitors numbering 279. Revenue from the hire and showing of films was £4,007. The weekly copies of the "British News" continued to be popular with all African audiences, rural and urban. The African Film Censorship Board was subjected to increasing demands from urban static cinema exhibitors, who continued to expand in number and in their hirings of films from commercial distributors.

Commercial cinemas in Northern Rhodesia, totalling ten, receive their feature films from a South African organisation. These cinemas are all on the line of rail, e.g., Nkana, Kitwe, Mufulira, Chingola, Luanshya, Ndola, Lusaka, Broken Hill, Chisekesi and Livingstone. At the outstations the supply of films is largely maintained by the Cinema Section of the Information Department. No film companies

operate in the Territory. The only production at present is undertaken by the two Government organisations, the Information Department Unit and the Central African Film Unit, which became the Federal Film Unit during the year.

INFORMATION SERVICES

In addition to the Broadcasting and Cinema Sections already mentioned, the Information Department maintained Press, Photographic and Tourist Sections as well as a reference library.

The Press Section had a heavy burden of work on the implementation of Federation. The senior Press Officer was seconded during the second half of the year to the Federal Service. Nevertheless 1,616 Press communiques were issued—a record. Eighty news stories and thirty-five feature articles were distributed, many of the latter illustrated by the Photographic Section. The Press distribution list rose to over 100, and several of the chief additions were American news agencies. Twenty-two overseas Press visitors were given help by the section and these visitors included representatives from *The Times*, *Life*, *News-Chronicle*, *Observer*, *Daily Express*, *New York Times* and the *Philadelphia Bulletin*.

The Photographic Section reached, for the first time, a total of over 1,000 photographs published in the local and overseas Press. The photographic display for the Northern Rhodesia Pavilion at the Rhodes Centenary Exhibition was supplied by the section. A first essay in pictorial wall sheets for Africans was successful and three editions of *Advance* were published.

The Rhodes Centenary Year saw the publication of a new *Handbook to Northern Rhodesia*, a pocket guide; *North of the Zambezi*, the story of Northern Rhodesia; and albums of photographs on game and the Victoria Falls.

TOURIST DEVELOPMENT

The Tourist Section, at Livingstone, continued to conduct the publicity and administrative sides of the Government-conducted big game safaris. A booklet *Big Game Hunting in Northern Rhodesia* was produced and distributed widely in Europe and America. Only four hunters, however, took up places in the scheme and during the latter half of the year further plans were made to increase publicity in America and the production of a colour film, "Luangwa Safari", was begun.

The Tourist Officer, under the direction of Headquarters Staff, was responsible for the Northern Rhodesia Pavilion at the Rhodes Centenary Exhibition at Bulawayo.

The Rhodes Centenary Regatta at Livingstone marked a record number of visitors in one month to the Tourist Office—1,693. Personal inquiries during the year totalled 10,506, and written inquiries 1,180.

Tourist facilities improved throughout the Territory during the year. The new Ridgeway Hotel at Lusaka was opened and the three rest houses in the Eastern Province, run by the department, provided much-needed tourist accommodation in this big game area. The Kafue National Park was opened, temporarily, for two months to mark the Rhodes Centenary celebrations, and publicity, catering and accommodation in a temporary rest camp was undertaken by the department.

Chapter 13: Local Forces

The local force in Northern Rhodesia consists of one regular infantry battalion, the 1st Battalion, The Northern Rhodesia Regiment. It is composed of British officers and British N.C.O.s seconded from the Regular British Army, and African N.C.O.s and African other ranks recruited from within the Territory. The African establishment of the battalion is drawn chiefly from the Bemba, Ila, Ngoni, Chewa, Lozi, Nsenga and Tonga tribes.

The battalion is trained as an ordinary infantry battalion and fulfils the normal role of an infantry battalion in peace-time.

Prior to 1933 the battalion formed the military section of the Northern Rhodesia Police in which capacity it fought with distinction in the 1914-1918 war and it was present on the 13th November, 1918, at the surrender of the German forces under the command of General von Lettow-Vorbeck.

The battalion continued to operate after 1933 under the Northern Rhodesia Police Ordinance of 1926 and appointments of European personnel were made by the Colonial Office. In 1937, however, a decision was made to model the Northern Rhodesia Regiment more closely on the King's African Rifles and the Royal West African Frontier Force. As a result, the Northern Rhodesia Regiment Ordinance of 1937 was enacted and since then the European personnel have been seconded from the Regular Army.

During the 1939-1945 war the battalion served with distinction in Somaliland, Abyssinia, Madagascar and the South East Asia Command.

The headquarters of the battalion is at Lusaka, with one company in Bwana Mkubwa.

The approved estimates for the first six months of 1954 include a provision of £347,900 for defence.

Chapter 14: General

LANDS

The difficulty experienced by local authorities in providing extensions to existing services continues to limit the expansion of most townships, but the demand for plots, particularly in residential areas, continued throughout the year. Many lessees were even willing to take plots before piped water was available. The rough tracks existing before proper roads were made, though they might provide physical obstacles, did not daunt these eager home-builders.

The town planning authorities carried their schemes a further stage forward by hearing objections to the draft proposals and where advisable modifying the schemes to meet objections. Most schemes have now been forwarded to the Town Planning Board, the last stage before they are submitted for approval as statutory schemes by the Governor in Council. The Southern Rhodesia Town Planning Staff stationed in the Territory prepared many detailed plot layouts of areas zoned for various purposes in the draft town planning schemes.

During the year 519 leases for township plots were issued, and 117 smallholdings in urban areas were alienated. There were 188 leases for farms issued in 1953, but at the same time fifty-eight farms were surrendered to the Crown, making an increase of 113,467 acres of land held under lease and bringing the total land under leasehold to 1,780,467 acres.

The demand for ten-acre residential smallholdings in the vicinity of the Copperbelt towns has intensified during the year and has returned to its former level. This is no doubt influenced by the shortage of available serviced plots in the towns. The demand for farms is steady but their alienation is influenced by the generally poor quality of remaining Crown land along the line of rail.

SURVEYS

Full use was made of the services of both departmental and private licensed surveyors to keep plot surveys ahead of township development, as well as to reduce the arrears of survey of agricultural land. A very large programme of plot surveys was undertaken in the established Copperbelt towns, and, in addition, sufficient plots were laid out for

immediate needs at the new township of Kalulushi (Chibuluma Mine), and a start was made on the survey of plots in the Government township at Bancroft Mine. The smaller towns in the Southern Province, which are mainly farming centres, are expanding in unexpected and encouraging fashion, for hitherto they have perhaps been a little neglected owing to pressure of work elsewhere. The dry season of 1953 provided an opportunity to survey sufficient plots of all types in these townships to satisfy the demand for some time to come. The western half of the Mkushi block was surveyed into farms planned by the Agricultural Department and these farms will shortly be available for alienation. Some field records have yet to be received, and the actual number of farms surveyed in the Territory as a whole during the year is not therefore accurately known; it is certain that it will be over 160, and this represents the biggest step forward in the survey of agricultural land that it has been possible to take since the war.

A combined party of surveyors from the Department of Surveys and Land and the Directorate of Colonial Surveys observed a chain of triangulation connecting the geodetic arc with a north-south chain running from the Southern Rhodesia triangulation to the Congo Border Survey. This is a valuable contribution to the survey of the Territory, and as a result it will soon be possible to contemplate the tying together on geographical co-ordinates of blocks of cadastral survey, which, though they may adjoin, cannot by any means always be said to "fit where they touch".

Work has continued on the detailed survey of the eastern portion of the Kafue Flats, and has revealed that "flats" is an appropriate name, the average gradient over forty miles west of the railway bridge being of the order of $1/350,000$. The survey was originally undertaken so that the possibility of irrigating the flats could be examined, but agricultural reports on the soil chemistry have been discouraging. It transpires, however, that the survey data will be most valuable in connection with the hydro-electric scheme, and the survey is now being extended westwards to Namwala and Meshi-teshi.

GEOLOGICAL SURVEY

Fieldwork continued without interruption during 1953 and good progress was made in all areas. Geological mapping in the north-east section of the Gwembe District, together with the coal deposits of this area, was completed. Analyses of the coal from the twelve-foot seam mentioned in the last report showed that the quality of the coal was disappointing, but further work done in opening up this seam will enable less weathered samples to be taken for analysis and it is hoped that these may show some improvement. Sufficient work has now been done in all sections of the Zambezi Valley to indicate the essentially low-grade character of the coal throughout.

The investigation into the economic possibilities of the pyrochlore deposit at Nkumbwa Hill, Isoka District, reached the stage where companies interested in exploitation were asked to submit proposals for further examination of the deposit.

In the North-west Mumbwa District, field investigations have shown the desirability of carrying out a certain amount of exploratory drilling on selected copper deposits. It is hoped to do this during 1954. Geological investigation of the proposed tunnel section of the Kafue Gorge hydro-electric project was completed, and exploratory drilling at selected points on the tunnel line was commenced.

The first report to be published by the Geological Survey went to press in November and publication is expected shortly. That report deals with the limestone and slate deposits of the Fort Rosebery District.

RURAL DEVELOPMENT

Progress in the peasant farming groups has continued to be good, and it can now be considered that these farms have passed the initial experimental period. Such importance is attached to the expansion of stabilised agriculture on sound agricultural principles with a reasonable economic return to the farmers, and the associated benefits in the conservation of natural resources, that a revolving fund of £260,000 has now been created from which it is intended to finance peasant farming groups.

Consideration has been given for some time to the better organisation of the fisheries of the Lake Mweru and Luapula region. Progress in this connection has now reached a point where it has been decided to establish an ice plant at Nchilenge on Lake Mweru.

Attention in recent years has been concentrated on improving the rural environment with the development of better agricultural methods, provision of better communications and conservation of water supplies. Less attention has been devoted to the stimulation in Africans of an active desire to work for their own betterment. Community development in this respect has not, however, been overlooked. Provision was made this year to expand the existing African Local Government School at Chalimbana, where it is intended to run community development courses which will be attended not only by members of native authorities, but also by African Civil Servants, employed by private agencies in rural areas, and prominent or interested members of rural communities.

GAME AND TSETSE CONTROL

To mark the Rhodes Centenary Year, the southern section of the Kafue National Park was opened to visitors during August and September. Temporary accommodation was provided at Ngoma Camp, and a very satisfactory quantity of game was to be seen. The animals are becoming really tame, and there is great promise for the future.

The build-up of game in the reserves elsewhere continues, and as long as the present areas are held there is no danger that species will be exterminated. The Luangwa Valley is a particularly notable area in this connection, and tourist traffic to certain favoured spots, such as Chief Nsefu's Game Reserve, is increasing. Outside the reserves the picture is becoming patchy: a few of the controlled areas still abound in game, but in others the pressure of hunting in a rapidly developing country is telling, and wild life is steadily receding. A draft Fauna Conservation Bill is now under consideration by the Government, the object of this being not only to tighten up the law against abuses and overshooting, but also to rationalise the conservation system with due regard to the changing conditions in the Territory. The fate of game in the future will depend greatly upon an effective public interest in conservation, and in this connection it is encouraging to note that a Northern Rhodesia Game Preservation and Hunting Association has now been formed.

Control, as well as conservation, is still much in the picture in farming areas, and the "vermin control" service provided by the Game and Tsetse Control Department is on constant call to deal with dangerous and destructive pests, from man-eating lions to monkeys.

The survey of the distribution of tsetse fly was continued, and by the year-end all but a quarter of the Territory had been covered. A scheme to reclaim a 200-square-mile area infested with fly west of Chingola on the Copperbelt was started, as also was a scheme south of Mumbwa Boma, primarily directed against the sleeping sickness menace but with advantage also to an intensive agricultural development area nearby. Selective clearing of bush still stands as a most effective and economical method of attacking the fly, particularly where supported by control of game and, in certain limited areas, by the application of insecticides.

PUBLICATIONS BUREAU

The Northern Rhodesia and Nyasaland Publications Bureau has carried on since 1948 the work of arranging to publish and distribute books of general interest for Africans which had formerly been undertaken by the Northern Rhodesia Literature Committee and the Nyasaland Education Department. It is largely financed from

Colonial Development and Welfare funds. Its main objects are to encourage African authors; to create, mainly by providing for them, the love of books and the habit of reading for pleasure; and to lay the foundations of a healthy book trade.

Over 100 new manuscripts were submitted to the bureau during the year. The scope and volume of work entailed in the preparation of manuscripts for publication surpasses the personal resources of the staff and a large proportion of their time has to be spent in arranging to utilise and remunerate the expert services of others, linguists, artists, and men of letters. A very great deal of time and attention was also given to the preparation of grammars and dictionaries, as well as to seeing standard vernacular readers for schools through the printing-press.

Among the ways in which interest in the writing and buying of books was encouraged were broadcast talks and reviews and advertisements in newspapers and magazines read by the African public. A number of tours were also undertaken which provided useful information about the popularity of books published and which supplemented the existing channels of distribution. At the end of the year a quarterly magazine was started with the object of describing the work of the bureau and encouraging Africans to read and write books in their own languages.

During 1953, twenty-one new titles and six reprints or new editions were produced, totalling some 160,000 volumes. Negotiations with publishers on behalf of African and other authors form an essential part of the bureau's work and in this respect it performs some of the functions which in England would be undertaken by the Society of Authors or a good literary agent.

A system of guarantees for sales of a number of copies of each edition has been worked out with satisfactory results. An important side of the work is the calculating of and watching these guarantees and keeping a check on production and expenditure in relation to sales.

The building up of a satisfactory distribution system remains the major problem, and several experiments were made during 1953 to improve the channels of distribution, particularly to those places away from the main roads. The large areas involved, the still considerable proportion of illiteracy and above all, the fact that the habit of reading for pleasure has not been established, constitute obstacles that can only be overcome gradually. In Northern Rhodesia marketing is mainly in the hands of the United Society for Christian Literature; in Nyasaland distribution is managed by the Bureau's Business Assistant on commercial lines through a semi-independent organisation, the

African Book Centre. In both countries, branches and agencies are being set up not only in the towns but also in the rural areas, and the relatively safe school trade is used as support for the expansion of sales to the public.

A list of publications of general interest relating to Northern Rhodesia is found in Part III, Chapter 5.

Chapter 15: Cultural and Social Activities

RHODES-LIVINGSTONE MUSEUM

The Rhodes-Livingstone Museum at Livingstone is the Territory's National Museum. It had its origin in 1930 as a collection of objects of African material culture and in 1934, the then Governor, His Excellency Sir Hubert Young, extended the collections to become a memorial to the great Central African explorer, David Livingstone. It was in 1934 that the museum was first opened to the public as the David Livingstone Memorial Museum.

With the rapid growth of the collections it became apparent in 1946 that it would be necessary to build a new museum with adequate display, store and workroom facilities. The necessary funds were most generously subscribed by the copper mining companies, the Beit and Rhodes Trusts, the Nkana-Kitwe Lottery and many others, and the new Rhodes-Livingstone Museum was finally opened to the public in May, 1951.

The design of the museum enables the exhibits to be set out in a logical progression, from the earliest geological times in Northern Rhodesia up to modern industrial development. It is a museum of human culture and ecology and is designed to show how, starting from the smallest beginnings, the results of human endeavour have enabled man to conquer the handicap of his environment and have thus brought about the mastery and development of his country's natural resources. It is, in a word, the Museum of Man in Northern Rhodesia and it is not the policy of a museum of this size to mix zoological, botanic or geological exhibits with the historical or ethnological ones except in so far as they help to interpret the story of the people who have lived or who are living in the Territory or have influenced its history. The museum is famous for its collection of relics of David Livingstone, early maps of Africa and collections of Bantu material culture and prehistoric archæology of Northern Rhodesia. The nucleus of a small natural history collection is already planned for Lusaka or the Copperbelt and within the next ten years it is hoped to be able to expand this to become the natural history museum of the Territory. A prefabricated building, to be used first for a David Livingstone Centenary Exhibition in 1955, will be its first home and a permanent building will be erected later either in Lusaka or on the Copperbelt.

In addition to the permanent exhibitions, the museum carries on a visual aid programme for European and African schools in the Territory. This takes the form of cinematograph shows, travelling loan exhibits, a film strip library and talks by members of the staff.

Research is carried out into African prehistory and ethnography by the Curator and the Ethnographer. Various expeditions are undertaken each year, either alone or in conjunction with other museums and important discoveries and collections have been made in this way. Research into indigenous African music is carried out under the auspices of the museum. There is a rapidly growing reference library on those subjects in which the museum specialises, and the museum publishes a series of occasional papers.

The museum is also the headquarters of the Monuments Commission of which the Curator is the secretary, and of the Northern Rhodesia Society, formed in 1950 to encourage wider popular interest in Northern Rhodesia. The society publishes the *Northern Rhodesia Journal* twice yearly and its members are entitled to borrow books from the museum library.

THE NATIONAL MONUMENTS COMMISSION

The Commission for the Preservation of Natural and Historical Monuments and Relics, to give it its correct title, was established by a Government Ordinance which came into force on 4th June, 1948. It is administered from the Rhodes-Livingstone Museum at Livingstone and the objects underlying its establishment were to ensure that all known sites of national interest or importance should receive adequate protection; to inquire into reports of new sites, to open up national monuments to the public, and to provide such readily absorbed information about them as might be necessary in order to explain them to visitors.

Up to the end of 1952 the only executive officer was the secretary, who had endeavoured to visit and inspect as many of the reported sites as possible, and where practicable to investigate the potentialities of newly reported sites. The work of the commission now extends widely over the whole Territory and in 1953 a full-time Inspector of Monuments was appointed. Proclaimed monuments now receive regular tours of inspection, protective and maintenance measures are more adequately enforced, and many more new sites are now receiving proper investigation than has been possible hitherto.

During the five and a half years of its existence the commission has compiled a register of all known sites of national or historical interest, or of outstanding natural beauty, and in addition has proclaimed a total of twenty-two national monuments, a list of which is given below. Of these the last two were proclaimed in 1953.

In 1951 the commission adopted a standard design for a national monument to be erected at sites of historic interest throughout the Territory. This takes the form of a rectangular plinth of local stone with cement top and carrying a suitably worded bronze tablet and the commission plaque, a bronze lozenge bearing the title of the commission and number of the site. The first two of these monuments were erected in 1952 at places within the Victoria Falls Conservancy, one at the site of the pontoon crossing at the Old Drift where supplies for North-Western Rhodesia were ferried across the Zambezi from the south before the building of the Falls Bridge, and the other in the Pioneers' Cemetery at the settlement of Old Livingstone. A ceremonial unveiling of these two monuments was held on the 28th November. In 1953 a similar monument was erected on the Chambesi River to mark the site of the cease-fire at the end of the East African Campaign in 1918. This was ceremonially unveiled on the 14th November, the anniversary of the date on which the cease-fire took effect. A standard monument is being erected at Kalomo, the site of the first capital of North-Western Rhodesia, and during 1954 others will be erected at other historic sites.

List of Proclaimed National Monuments

The Victoria Falls—an area of 15,000 acres.
The Mumbwa Caves.
Nachikufu Hill Caves.
Nsalu Hill Cave.
Kasamba Stream.
Leopard's Hill Cave.
Chifubwa Stream Rock-Shelter.
The David Livingstone Memorial, Chitambo Village.
Chisimba Falls.
Kalambo Falls.
Bell Point, Lunsemfwa Wonder Gorge.
Rock Engravings on Ayrshire Farm, Lusaka.
Nachitalo Hill, Mkushi District.
Fort Monze and Cemetery.
Kundalila Falls, Serenje District.
Rock Paintings on Rocklands Farm, Fort Jameson.
The *Good News* Monument, Abercorn District.
The 1914-18 War Memorial, Abercorn High Street.
The Maramba Quarry Site, Livingstone.
Sutherland's Farm Site, Livingstone.
Twin Rivers Kopje.
Zawi Hill.

A complete list of proclaimed national monuments with notes on their historic or other interest is published each year in the commission's annual report. The report also contains a copy of the

Ordinance, the conditions governing the issue of permits to excavators in the Territory and the by-laws regulating the behaviour of persons with regard to proclaimed national monuments or within the Victoria Falls Conservancy. During 1953 a comprehensive and well-illustrated handbook to the Victoria Falls and environs was published by the commission. This is not purely a tourist guide but aims at giving all available information on the Victoria Falls, their history, geology, archæology, natural history, etc. It is obtainable from the office of the commission and is proving very popular.

RHODES-LIVINGSTONE INSTITUTE

For the Rhodes-Livingstone Institute, 1953 was the fourth year of the five-year Omnibus Research Scheme which is financed by grants from Colonial Development and Welfare funds, by grants from Central and East African Governments, and by generous donations from various private companies. In October, 1953, the offices and library of the institute at its new site near Lusaka were officially opened by His Excellency the Governor of Northern Rhodesia, Sir Gilbert Rennie, who is the President of the Board of Trustees of the Institute.

The Director, Dr. J. C. Mitchell, moved from Luanshya to Lusaka in January, and left in February to spend six months in the United Kingdom. He spent part of this time as a Simon Research Fellow at the University of Manchester and the rest in writing up the material he had gathered during his Copperbelt study. Mr. V. W. Turner, who is studying the Lunda people, returned to the field in April for his second tour. Mr. Watson and Mr. van Velsen, who are studying the Mambwe-Lungu and Lakeside Tonga peoples respectively, left in November for the United Kingdom to undertake the writing up of their preliminary studies. Mr. A. L. Epstein, who is making a study of native administration, spent the first six months of the year in Bemba country, and subsequently moved to the Copperbelt. Miss E. M. Richardson also moved to the Copperbelt after making rural studies in areas occupied by the Bemba and Ushi tribes. She is studying the economic aspects of urban family life.

Mr. A. J. B. Hughes, Beit Research Fellow, completed his work among the Ndebele of Southern Rhodesia, and is now writing the results of his researches. A paper on the Ndebele, *Tribe, Caste and Nation*, should appear during 1954.

Only two publications appeared during the year. One was No. 13 of the Institute's Journal, *Human Problems in British Central Africa*; the second, *Accommodating the Spirit*, by J. F. Holleman (Rhodes-Livingstone Paper No. 22), is based on the Shona research financed by the Beit Trust.

DRAMATICS AND MUSIC

During the year, amateur dramatic societies in all major towns in the Territory presented regular productions. Most societies are trying to build their own theatres, and all possible methods of money raising were employed.

In the first week of May a dramatic festival was held at Lusaka. All societies were invited to stage a play at this festival and six productions were entered. These came from Kitwe, Chingola, Luanshya, Broken Hill, Livingstone and Lusaka. An adjudicator came from the Union of South Africa and awarded the trophy to Lusaka Theatre Club for its production of "The Lady's Not For Burning", by Christopher Fry. The dramatic festival will now become an annual event in the Territory.

In most towns there are music societies which presented regular public concerts of gramophone records. Live concerts by local artists were given occasionally and visiting artists give concerts in towns on the line of rail.

SPORT

The anniversary of the birth of Cecil John Rhodes gave Northern Rhodesia the opportunity to stage the greatest series of sporting attractions in its history. Under the title of the Rhodes Centenary Games and staged at Kitwe during the month of July almost every sport in season at that time of the year participated. Our southerly neighbours provided the opposition, and the inter-territorial annual fixtures were arranged at the same time in order to create a sporting festival. From the events the two countries emerged equal with the North being successful at soccer, boxing, wrestling and badminton.

Northern Rhodesia continued her steady progress at rugby and again won the Clark Cup against Southern Rhodesia. This was the fourth successive victory gained, with a winning aggregate of thirty-four points to eleven from the two games. For the first time an international game was staged in the Territory when the Australian "Wallabies" met Rhodesia at Kitwe. The home players did exceptionally well to hold their distinguished visitors to an eight-all draw. The Territory benefited from a tour by the Combined Western Province Universities XV, who played six games at the various centres, and left with an unbeaten record. An historic step forward in this sport was the formation of the Rhodesia Rugby Union, administered jointly by the two territorial bodies.

Apart from winning the Levy Cup in the annual tournament with Southern Rhodesia, the Northern Rhodesia Football Association launched out with the very ambitious scheme of bringing an overseas touring team to the Territory. Our visitors were the famous amateur

side Bishop Auckland and of the games played here the Copperbelt managed a 2—0 win, but the tourists had convincing wins at Broken Hill and Livingstone. They ended their tour by beating Northern Rhodesia 5—0 at Kitwe. Other soccer visitors were the R.A.T.G. group from Southern Rhodesia. On a farewell trip they played at Lusaka and on the Copperbelt, winning both games.

Southern Rhodesia took the Clark Cup Athletics Trophy back with them by a win of 127 points to 87. Our affiliation to the British Empire Games Federation was accepted during the year and the Territory will be represented at the Empire Games in 1954.

Early in the year the junior swimmers were successful in winning the All-Rhodesia swimming, diving, and water polo championships in Southern Rhodesia. The seniors did not fare as well, but one Northern Rhodesian representative was selected for the South African Championships.

Boxing is a sport which has rapidly gained popularity in Northern Rhodesia, and 1953 was a most successful year. The team won the Leggo Shield in competition with Southern Rhodesia by four bouts to three during the games period. Several of our boxers were successful in the South African championships.

Our wrestlers swept the board at the Rhodes Centenary Games, winning from Southern Rhodesia seventeen out of the twenty titles at stake. Northern Rhodesia weight-lifters showed great improvement during the year, and several of them came near to winning South African titles.

Another settler from South Africa was their triple badminton champion and he has stimulated interest in the sport which had nearly 400 players at the end of the year.

For the first time Northern Rhodesian bowlers won the "rubber" from Southern Rhodesia by winning two tests and drawing the other. The territorial championships drew a record number of entries.

An innovation was the birth of dirt track speedway racing with the opening of the Kitana Track on the Copperbelt. A South African team opened the track with two tests against Northern Rhodesia, each side winning one.

The other sports such as baseball, softball, tennis, cricket and squash had a lean time during the year. The first two were still in the pioneering stage, but both games have a considerable following in the Midlands and on the Copperbelt. After the previous year's success our

cricketers failed to reproduce form and were soundly beaten in Salisbury by an innings and eighty-two runs. There was a dearth of young tennis players, and all of the Northern Rhodesia championships went to Southern Rhodesia players who came up for the Centenary Games.

In hockey three Northern Rhodesia women gained places in the Rhodesian side, but only one man gained representation.

Horse racing continued in popularity in Lusaka where the new track became well established. The main drawback was the small number of entries, but these improved towards the end of the year.

African sport also had a most successful year, perhaps not in the performances of local participants, but from the staging of celebrations for Centenary Year.

For two days during August the Central African Games were staged at Luanshya in a new magnificent stadium built for the occasion. These games brought to Northern Rhodesia some of the finest African athletes in the continent, for teams of twenty-two competed from Kenya, Uganda, Southern Rhodesia and Nyasaland as well as those from this Territory. The teams from East Africa were much too superior for those from Central Africa and the events developed into a battle between Kenya and Uganda. At the end of the two days Kenya were winners, having scored seventy points. Second came Uganda with fifty-four, Southern Rhodesia scored five points, and Northern Rhodesia only two. Nyasaland failed to register even one point. The highlight of the games was the performance of a Uganda high-jumper who cleared 6 feet $6\frac{1}{4}$ inches.

In conjunction with the games there was a three-cornered football tournament between Northern Rhodesia, Southern Rhodesia and the Belgian Congo. For this purpose, Northern Rhodesia provided two sides which were beaten by the other participants. Southern Rhodesia and the Belgian Congo met in the final at Kitwe, and after a most exciting game Southern Rhodesia eventually took the Rhodes Centenary Trophy.

Arising out of the Central African Games, efforts are being made to bring African teams together at regular periods in the future for a similar sporting festival in the different countries.

For the first time an African Sportsman of the Year was selected and presented with the Sir Gilbert Rennie Cup. The winner was a Sub-Inspector of the Northern Rhodesia Police, who was selected for his conduct on and off the sports field, and the encouragement he had given to other young sportsmen.

PART III

Chapter 1: Geography and Climate

The Protectorate of Northern Rhodesia lies on the plateau of Central Africa between the longitudes 22° E. and $33^{\circ} 33'$ E. and between the latitudes $8^{\circ} 15'$ S. and 18° S. Its area is 290,323 square miles, and its boundaries are 3,515 miles in length.

Its neighbouring territories are Angola (Portuguese West Africa) on the west, the Belgian Congo on the north and north-west, Tanganyika Territory on the north-east, Nyasaland on the east, Portuguese East Africa and Southern Rhodesia on the south-east and south and the Caprivi Strip of South-West Africa on the south. The Zambezi River forms the boundary of Northern Rhodesia on the south for about 520 miles, separating it from the Caprivi Strip and Southern Rhodesia, whilst the Luapula River forms another natural boundary between the Protectorate and the Belgian Congo, along the northern edge of the Congo Pedicle and north as far as Lake Mweru, for a distance of about 300 miles. The remaining boundaries follow watersheds and occasional streams or are marked by beacons across land areas.

With the exception of the valleys of the Zambezi, the Luapula, the Kafue and the Luangwa Rivers the greater part of Northern Rhodesia has a flat to rolling topography, with elevations varying from 3,000 to 5,000 feet above sea level, but in the north-eastern districts the plateau rises to occasional altitudes of over 5,000 feet. In many localities the evenness of the plateau is broken by hills, sometimes occurring as chains which develop into areas of broken country. The highest group of hills is the Muchinga Mountains which form part of the Great Escarpment running down the western edge of the Luangwa River Valley, and of these, individual peaks rise to about 8,000 feet.

On the whole the Territory is well wooded, even the crests of the highest hills bearing trees and orchard-like bush. Hundreds of square miles of country lie under tall grass along the Kafue in an area known as the Kafue Flats, in the Barotse Plains near the Zambezi and also over a large area south of Lake Bangweulu. These open grassy spaces, for the most part, contain swamps in which the water level fluctuates

with the rainy seasons. The southern and central districts comprise areas where sparse bush alternates with grasslands in which farming and ranching have developed.

A glance at a large-scale map suggests that the Territory is well watered, but many of the smaller rivers shown have a seasonal flow and dry up after the rains. The larger rivers, the Zambezi, Kafue, Luangwa, Chambeshi and Luapula, together with their larger tributaries, have an all-year-round flow. The three great lakes of Northern Rhodesia are Lake Bangweulu in the northern districts and Lakes Mweru and Tanganyika on the northern boundaries. Lake Bangweulu and the swamps at its southern end cover an area of about 3,800 square miles, and there are a number of other much smaller lakes such as Lake Young in the Mpika District, Lake Chila near Abercorn, Lake Chirengwa near Ndola and Lusiwasi Lake (or Lake Moir) off the Great North Road to the north of Serenje. Northern Rhodesia has the greatest waterfall in the world, the Victoria Falls, on its southern boundary and the second highest waterfall in Africa, Kalambo Falls, 704 feet, on its northern border.

CLIMATE

Although Northern Rhodesia lies well within the tropics and towards the centre of the continent, its elevation relieves it from the extremely high temperature and humidity usually associated with tropical countries. Uncomfortable conditions of heat and humidity are confined to deep river valleys and so affect only a very small fraction of the Territory. The lower reaches of the Zambezi, Kafue and Luangwa Rivers are concerned, but these areas are sparsely populated.

The year may be divided into three well-defined seasons:

THE RAINY SEASON (late October to early April).

Rainfall is copious; the annual rainfall ranges from about thirty inches in the south to fifty-five inches in the north.

Day maximum temperatures generally 75° to 85° F.

Night minimum temperatures generally 60° to 67° F.

WINTER (May to August inclusive).

Very pleasant fair weather prevails. Ground frost usually occurs on a few nights.

Day maximum temperatures generally 72° to 82° F.

Night minimum (air) temperatures generally 35° to 50° F.

THE HOT SEASON (Mid-September to late October).

The hot season is short and usually there are showers.

Day maximum temperatures generally 88° to 98° F.

Night minimum temperatures generally 58° to 65° F.

Due to the stillness of the air there is a certain oppressiveness indoors during the evening and early part of the night towards the end of the hot season.

The following table shows average annual rainfall over the past twenty years and representative maximum and minimum temperatures during the hottest and coldest months of the year respectively:

<i>Station</i>	<i>Altitude</i>	<i>Annual rainfall in inches</i>	<i>Mean maximum temperature October</i>	<i>Mean minimum temperature June</i>
Abercorn . .	5,440	45.65	83.3° F.	51.9° F.
Kasama . .	4,544	50.28	87.5	50.5
Mpika . .	4,598	43.20	85.8	49.1
Fort Rosebery .	3,759	41.42	88.5	45.2
Mwinilunga .	4,447	52.02	85.9	43.5
Ndola . .	4,163	45.66	83.5	41.5
Broken Hill .	3,902	34.90	89.3	47.8
Lusaka . .	4,191	32.67	87.9	50.1
Petauke . .	3,389	36.48	93.0	52.2
Fort Jameson .	3,386	40.34	89.1	53.7
Mongu . .	3,459	37.16	93.0	50.1
Livingstone .	3,230	26.15	94.5	45.0

Chapter 2: History

Relics of prehistoric man have been found in Northern Rhodesia, in particular the skull of *Homo rhodesiensis* in the Broken Hill Mine, and Stone Age culture around the Victoria Falls. At a rough estimate they suggest human occupation at anything between 20,000 and 50,000 years ago, though an exhaustive examination of all possible areas has yet to be undertaken. The early history of Northern Rhodesia is fragmentary and can only be gleaned from tribal histories, which are subject to doubt, since they are passed down by word of mouth from generation to generation, and from the accounts of the few explorers who penetrated the "Dark Continent" from the east and west coasts.

The Portuguese Governor of Sena, Dr. Lacerda, encouraged by the report of the half-breed Fereira who returned from Kasembe's capital, close to the eastern shores of Lake Mweru, in June, 1798, left Tete for the north. He was accompanied by Fathers Francisco, Jose and Pinto, twelve officers and fifty men-at-arms, but failed to reach his goal, and died within a few miles of Kasembe's capital. Father Pinto led the remnants of the expedition back to Sena, and it is from Dr. Lacerda's diaries, which Father Pinto with great difficulty saved, that the first authentic history of what is now North-Eastern Rhodesia is taken. Dr. Lacerda was followed in the early nineteenth century by two Portuguese traders, Baptista and Jose, who brought back stories of the great interior kingdom of the Lunda, which extended from Lake Mweru to the confines of Barotseland and included the whole of the country drained by the Upper Congo and its tributaries. This kingdom is reputed to have lasted from the sixteenth to the nineteenth century. Very few historical facts are known about it, but the name of Mwatiambwa or Mwachiamvwa, the dynastic title of the paramount chief, is associated, like Monomotapa, with many half-legendary stories. Neither of these expeditions was of any great geographical value, and it was not till 1851, when Dr. Livingstone made his great missionary journeys and travelled through Barotseland and in 1855 discovered the Victoria Falls, that the civilised world had its first authentic information of Northern Rhodesia. Other and later explorers who brought back stories of the barbarism of the natives, of the wealth of game, and of the glories of the Victoria Falls, were Serpa Pinto, Cameron, Selous and Arnot.

From the very early days when the hordes of migratory Bantu swept southwards from Central and Northern Africa, Northern Rhodesia has been subject to constant invasion from stronger tribes on its

borders, so much so that the vast majority of the present native population, though of Bantu origin, is descended from men who themselves invaded this country not earlier than A.D. 1700. One or two small tribes, numbering now only a very few thousand, such as the Subia on the Zambezi, are all that remain of the inhabitants of Northern Rhodesia prior to that date. Though the story of these invasions has passed into oblivion, their traces remain in the extraordinary number and diversity of races and of languages in the country.

At the present time the population of the Territory has been classified into seventy-three different tribes, the most important of which are the Bemba, Ngoni, Chewa and Bisa in the north-eastern districts, the Lozi, Tonga, Luvale, Lenje and Ila in the north-western districts, and the Senga, Lala and Lunda, sections of which are resident in both the eastern and western areas. There are some thirty different dialects in use, but many of them vary so slightly that a knowledge of six of the principal languages will enable a person to converse with every native of the country. Nyanja is in use as the official language of the police and of the Northern Rhodesia Regiment, and is probably the language most generally spoken by Europeans. In many instances the tribes overlap and encroach upon each other, and it is not uncommon to find a group of villages of one tribe entirely surrounded by villages of another tribe. Many of the tribes on the borders extended into neighbouring territories; in some instances the paramount chief resides in a foreign country and only a small proportion of the tribe lives in Northern Rhodesia.

The chief invaders of the early part of the nineteenth century were the Arabs from the north, the Ngoni, a branch of the early Zulus who fled from the oppressive tyranny of Tschaka and who settled in the north-east of the Territory, and the Kalolo, an offshoot of the Suto family, who in the beginning of the nineteenth century fought their way from the south through Bechuanaland and across the Zambezi under the noted Chief Sebitoani; they conquered the Toka, the Subia, and the Lozi and founded a kingdom which was distinguished by a comparatively high degree of social organisation.

The duration of the Kalolo kingdom was short, lasting between twenty and thirty years. Soon after the death of Sebitoani, the Lozi rebelled and massacred the Kalolo to a man, keeping their women. As a result of this the influence of their occupation is still to be seen in the Kalolo language, which is largely spoken amongst the tribes near the Zambezi. The Lozi under Lewanika enlarged their kingdom by conquering several surrounding tribes, such as the Nkoya, the Lovale and the Toka. Beyond these limits their authority was both nebulous and ephemeral.

In the year 1891 Lewanika was informed that the protection of Her Majesty's Government had been extended to his country as he had requested that it should be, and on 17th October, 1900, the Barotse Concession was signed by him and his chiefs and representatives of the Chartered Company. The concession was confirmed in due course by the Secretary of State for the Colonies, and under its terms the Company acquired certain trading and mineral rights over the whole of Lewanika's dominion, while the paramount chief was to receive, among other advantages, an annual subsidy of £850.

During this time the slave trade established by the Arabs continued unchecked. Its baleful influence had gradually spread from the shores of Lake Nyasa and Tanganyika over the whole Territory; but with the establishment of a Government post at Abercorn in 1892 the slave trade in this part of Africa received its first serious check. In each succeeding year more Arab settlements on the lake shore were destroyed. Sir Harry Johnston defeated the Arab chief Mlozi at Karonga in 1894, and the last caravan of slaves, which was intercepted on its way to the east coast, was released at Fort Jameson in 1898. Even after that, bands of slave-raiders were occasionally encountered on the north-east boundary and skirmishes with them took place as late as 1900; but with the final establishment of the administration of the British South Africa Company the slavers quickly disappeared from the country. The status of the conquered tribes under Lewanika's dominion was that of a mild form of slavery. This social serfdom was brought to an end by the edict of Lewanika, who in 1906 agreed to the emancipation of the slave tribes.

Before 1899 the whole Territory had been vaguely included in the Charter granted to the British South Africa Company, but in that year the Barotseland-North-Western Rhodesia Order in Council placed the Company's administration of the western portion of the country on a firm basis. It was closely followed by the North-Eastern Rhodesia Order in Council of 1900 which had a similar effect. The two territories were amalgamated in 1911 under the designation of Northern Rhodesia, and the administration of the Company (subject to the exercise of certain powers of control by the Crown) continued until 1924. In that year the administration of the Territory was assumed by the Crown in terms of a settlement arrived at between the Crown and the Company, and the first Governor was appointed on 1st April, 1924.

In the years that followed came the development of Northern Rhodesia's great copper industry. A bad start with the Bwana M'kubwa crash, one of the biggest mining fiascos in African history, was prelude to a brilliant future. The Territory's four big mines at Luanshya, Nkana, Mufulira and Nchanga came into production shortly after

Bwana M'kubwa collapsed in 1930. These four mines have altered the entire economic outlook of the Protectorate. A country whose progress rested on an annual revenue of about half a million pounds in a few years was netting ten million and more annually, and building up reserve funds of several million pounds. It is largely upon copper that the new schools, hospitals, roads and other recent witnesses to increasing prosperity are founded.

The 23rd October, 1953, was an historic day in the history of the Territory. A special issue of the *Federal Government Gazette* gave on that day the message of greeting from Her Majesty the Queen on the occasion of the full inauguration of the Federation of Rhodesia and Nyasaland. Northern Rhodesia had become a member of the Federation by an Order in Council on the 1st August, 1953.

Chapter 3: Administration

CENTRAL ADMINISTRATION

The constitution of Northern Rhodesia provides for an Executive Council and a Legislative Council. There is a majority of unofficial Members over official Members in the Legislative Council.

The Legislative Council is presided over by a Speaker. In the Ninth Legislative Council, which was dissolved on the 30th December, 1953, there were nine official Members and fourteen unofficial Members. Four of the unofficial Members were appointed to represent African interests, two of them being Africans selected by the African Representative Council. In December, 1953, provision was made by Order in Council for the constitution of the Legislative Council to be changed and on the 31st December, 1953, after the dissolution of the Ninth Legislative Council, this amended constitution was brought into force. This constitution provides for eight official Members and eighteen unofficial Members. Of the eighteen unofficial Members, twelve will be elected by the electorate, which is predominantly European, and six will represent African interests. Four of the six representatives of African interests will be Africans selected by the African Representative Council for appointment by the Governor and two will be nominated directly.

The Executive Council is presided over by the Governor and in 1953 consisted of seven official Members and four unofficial Members. One of the unofficial Members was one of the nominated Members of the Legislative Council representing African interests. The constitution of the Executive Council was not changed during 1953, but in December provision was made by additional Royal Instructions for the constitution to be amended so as to provide for five official Members and four unofficial Members. As before, one of the unofficial Members would be a representative of African interests. This revised constitution of the Executive Council will, it is expected, be brought into operation shortly after the Members of the new Legislative Council have been elected or appointed in February, 1954.

The Territory is divided into provinces and the provinces into districts under the administrative control of Provincial Commissioners and District Commissioners respectively. During the year the Barotse Province was re-named the Barotseland Protectorate and the title of Resident Commissioner given to its former Provincial Commissioner. The above-mentioned officers administer the Territory in accordance with the policy laid down by the Central Government.

LOCAL GOVERNMENT—RURAL AREAS

A system of local government is in force under which native authorities with their own treasuries are constituted with powers defined by statute. The native authorities can make orders, subject to the veto of the Provincial Commissioner, which have the force of regulations under the law. Such orders are made on minor matters affecting the welfare of the area concerned, markets, agriculture, forestry, game conservation, and so on. The native authorities can also make rules, subject to the approval of the Governor, such rules constituting more important local legislation for the peace, good order and welfare of the people of the area concerned, and including the levying of local rates and fees. The majority of native authorities raise levies for general or special purposes such as education. In addition they receive, either direct or by way of grants from Provincial Native Treasury Boards, all that is paid by way of native tax by Africans registered in their areas except for 1s. per tax which accrues to the Central Government and the 1s. per tax paid in urban areas which goes to meet the cost of welfare facilities.

The African Provincial Councils instituted in 1943 continued to prove their use as vehicles of African opinion. The standard of debates improved and their scope widened to include a large variety of topics of all degrees of importance. These councils consist of members selected by native authority councils, urban advisory councils and certain other bodies and are thus representative of all elements of the African community. They are at liberty to raise and debate any matter they wish. Their functions are advisory but Government pays careful attention to the views and wishes expressed. It is gratifying to note how well the rural and urban representatives mix and debate matters of general interest. From the councils, six in number, and from the Barotseland Protectorate, delegates are elected to attend an African Representative Council for the Territory, where the procedure is as nearly as possible that of Legislative Council. The African Representative Council is, like the Provincial Councils, advisory except for its function of electing to the Federal Assembly the two specially elected African members from Northern Rhodesia, and of selecting four Africans for appointment by His Excellency the Governor to the Legislative Assembly of the Territory.

The number of African Members to the Legislative Council was increased from two to four during the year.

LOCAL GOVERNMENT—URBAN AREAS

In the towns in Northern Rhodesia the normal form of local government is to be found and there are two municipal councils, five municipal boards and eight management boards. During 1954 three of the municipal boards are to be upgraded to municipal council status.

The only distinction between municipal councils and municipal boards is one of dignity in that municipal councils have power to appoint a mayor and aldermen whereas municipal boards are only empowered to appoint a chairman. In addition, there are six townships occupied only by Africans under management boards of Africans with normal local government powers. These African townships are near the larger towns in the Copperbelt and are in the nature of satellite suburbs, but they provide their own services, levy rates and serve a most useful purpose in training the Africans in local government procedure. There are also five mine township management boards which supervise the affairs of gazetted townships occupied exclusively by employees of mining corporations which also own all property in the area and provide all services. The only Government assistance given to these mine townships is that a Government grant is given towards the cost of welfare services.

The major local authorities have elected majorities and the municipal franchise rests on the ownership or occupation of rateable property to a capital value of £250. There is no legal bar to Africans voting or sitting on these local authorities but so far none has qualified, mainly because Africans live in housing areas where, under the subsidised rental system, services are provided at cost and the property is exempt from rates. Africans are, however, co-opted to African affairs committees in the main towns and have their own householders' committees and urban advisory councils.

All statutory boards and councils are authorities under public health legislation; can levy rates, borrow money, own and manage housing schemes and are in control of roads, water, power, town planning and other public services in their areas. They are not responsible authorities for education or medical services. Municipal councils and boards may make by-laws and raise loans from sources other than Government, while township management boards borrow all necessary loan money from the Government and work under Township Regulations enacted by the Governor in Council.

A Local Government Department under a Commissioner for Local Government is directly responsible to the Member for Health and Local Government, who is an unofficial Member of Legislative Council, for local government affairs in the Territory. The principal officers of the department are all specialised in local government; the department has legal and audit officers as well as a valuation officer. There is also a Municipal Association comprising representatives from all the local authorities which takes a leading part in co-ordinating opinions and initiating policy or legislation. A Northern Rhodesia Association of Local Government Officers has also been formed and has established a joint council with the Municipal Association. Most

of the chief officers of the larger local authorities are now professional officers drawn from the United Kingdom or South Africa, and a Local Government Officers' Pension Scheme is now in course of preparation.

The following table shows the revenue and expenditure (excluding African beer halls and welfare) and outstanding loan liabilities of local authorities for the years 1945-1953, from which will be seen the phenomenal growth of local government activities and responsibilities which has taken place in recent years:

	<i>Gross recurrent revenue</i>	<i>Gross recurrent expenditure</i>	<i>Loan liabilities</i>
	£	£	£
1945 . . .	170,562	162,705	250,662
1946 . . .	188,689	182,029	291,510
1947 . . .	226,995	220,009	357,935
1948 . . .	279,541	263,237	492,900
1949 . . .	356,726	328,349	709,626
1950 . . .	459,971	415,943	906,600
1951 . . .	561,872	560,300	1,538,066
1952 (Estimated) .	762,366	734,254	3,362,243
1953 (Estimated) .	1,128,339	1,045,461	5,100,000

Between 1948 and 1953 the Government has (excluding African housing) made £7,631,872 available for loans to local authorities for general purposes including the building of flats for letting or sale to people of the lower income groups, and for re-lending to the public for erection of houses for owner-occupation. Large schemes for improvement of essential public services, such as the supply of water and electricity and the provision of sewers, are being undertaken in the larger towns, and in several of the smaller towns schemes for the installation of water and electricity services are in hand.

The salient points of the scheme of Government grants to local authorities are that the Government pays contributions in lieu of rates on all Government rateable property, meets one-half of the public health expenditure incurred by local authorities, is financially responsible for the cost of national roads passing through a town, and makes over one-half of all motor licence fees collected in the town. There are also certain minor grants including an African housing subsidy. The revenue of local authorities, apart from these grants, is mainly derived from rating, although certain local authorities make a profit from their water and electricity undertakings. The differential rating system is followed, i.e. the local authority may levy rates at different amounts on the capital value of lands and/or buildings.

The only local government activities outside local authority areas is the work of road boards in farming areas. These boards, which are nominated boards and do not possess rating powers, administer funds for road construction work and maintenance voted by the Government.

Consideration is being given to the establishment of district councils by the fusion of one or more road boards and smaller townships into single units. The object is to create a local government unit with greater financial resources which is capable of being given wider powers and of employing more specialised staff.

Chapter 4: Weights and Measures

The Inspector of Weights and Measures was transferred from the Northern Rhodesia Police to the Department of Trade, Transport and Industry on 1st January, 1953. During 1953, the Inspector examined 6,300 weights and measures. He travelled over 15,000 miles on duty and visited 370 traders, more than half of these being surprise visits.

The last five years have shown a steady improvement in the standard and maintenance of weighing equipment in use in the Territory. The percentage of equipment found to be inaccurate has dropped steadily each year, from 28.9 per cent. in 1949 to 4.8 per cent. in 1953.

Chapter 5: Reading List

PUBLICATIONS OF GENERAL INTEREST RELATING TO NORTHERN RHODESIA

A.—EARLY TRAVEL.

1. *Missionary Travels and Researches in South Africa, including a sketch of Sixteen Years Residence in the Interior of Africa and a Journey from the Cape of Good Hope to Loanda on the West Coast; thence Across the Continent, Down the River Zambesi, to the Eastern Ocean.* By David Livingstone. (John Murray, London, 1857.)
2. *Narrative of an Expedition to the Zambesi and its Tributaries, and of the Discovery of the Lakes Shirwa and Nyasa, 1858—1864.* By David and Charles Livingstone. (John Murray, London, 1865.)
3. *The Lands of the Cazembe.* Translation of Dr. Lacerda's diaries and information about Portuguese expeditions, by Sir Richard Burton. Published by the Royal Geographical Society. (John Murray, London, 1873.)
4. *The Last Journals of David Livingstone in Central Africa from 1865 to His Death, continued by a Narrative of His Last Moments and Sufferings, obtained from His Faithful Servants Chuma and Susi.* By Horace Waller. Two volumes. (John Murray, London, 1874.)
5. *Across Africa.* By V. L. Cameron. (Daldy, Isbister, 1877.)
6. *How I Crossed Africa.* By Serpa Pinto. (Sampson, Low and Co., 1881.)
7. *To the Central African Lakes and Back.* By Joseph Thomson. (Sampson, Low and Co., 1881.)
8. *De Angola a Contra Costa.* By Capello and Ivens. (1886.)
9. *Garenganze.* By F. S. Arnot. (James E. Hawkins, 1889.)
10. *Les Lacs de l'Afrique Equatoriale.* By G. V. Giraud. (1890.)
11. *My Second Journey Through Equatorial Africa.* By H. Van Wissman. (Chatto and Windus, 1891.)
12. *Reality versus Romance in South Central Africa.* By James Johnston. (Hodder and Stoughton, 1893.)
13. *Travel and Adventure in South-East Africa.* By F. C. Selous. (Rowland Ward, 1893.)
14. *Livingstone and the Exploration of Central Africa.* By Sir H. H. Johnston. (Philip and Son, London, 1894.)
15. *A Hunter's Wanderings in Africa.* By F. C. Selous. (Richard Bentley, 1895.)
16. *British Central Africa.* By Sir H. H. Johnston. (Methuen, 1897.)
17. *On the Threshold of Central Africa.* Contains a full, careful description of the Upper Zambezi and an account of the subjects of Chief Lewanika. By Francois Coillard. (Methuen, 1898.)
18. *Exploration and Hunting in Central Africa.* By Major A. St. H. Gibbons. (Methuen, 1898.)
19. *Among the Wild Angoni.* By W. A. Elmslie. (Oliphant, Anderson and Farrar, 1899.)
20. *The Kingdom of the Barotse.* By A. Bertrand. (T. Fisher Unwin, 1899.)

21. *Three Years in Savage Africa*. By Lionel Decle. (Methuen, 1900.)
22. *In Remotest Barotseland*. By Colonel C. Harding. (Hurst and Blackett, 1905.)
23. *Coillard of the Zambezi*. By C. W. Mackintosh. (T. Fisher Unwin, 1908.)
24. *Via Rhodesia*. By Charlotte Mansfield. (Stanley Paul and Co., 1910.)
25. *The Great Plateau of Northern Rhodesia*. By H. Gouldsbury and H. Sheane. (Arnold, London, 1911.)
26. *In South Central Africa*. By T. M. Moubray. (Constable and Co., 1912.)
27. *Thinking Black*. By D. Crawford. (Morgan and Scott, 1912.)
28. *Missionary Travels in Central Africa*. By F. S. Arnot. (Alfred Holms, 1914.)
29. *Gold and the Gospel in Mashonaland, 1888*. Being the journals of (1) The Mashonaland Mission of Bishop Knight and (2) The Concession Journey of Charles Dunell Rudd, edited respectively by Constance E. Fripp, M.B.E., and V. W. Hiller. Oppenheimer, Series No. 4. (Chatto and Windus, 1949.)

B.—SOCIOLOGICAL STUDIES.

1. *Native Tribes of North-Eastern Rhodesia*. By J. C. C. Coxhead. (London Royal Anthropological Institute, 1914.)
2. *The Ila Speaking Peoples of Northern Rhodesia*. By Rev. W. E. Smith and Captain A. M. Dale. (Macmillan and Co., 1920.)
3. *In the Heart of Bantu Land*. By Dougald Campbell. (Seeley Services, 1922.)
4. *In Witch-bound Africa*. By F. H. Melland. (Seeley Services, 1923.)
5. *Barotseland*. By D. W. Stirke. (John Bale and Sons.)
6. *The Lambas of Northern Rhodesia*. By C. M. Doke. (Harrap, London, 1931.)
7. *Modern Industry and the African*. By J. Merle Davis. (Macmillan, 1943.)
8. *The Native Tribes of the Eastern Province of Northern Rhodesia*. By E. H. Lane Poole. (Govt. Printer, 1938.)
9. *Land, Labour and Diet in Northern Rhodesia*. By Audrey I. Richards. (International Institute of African Languages and Culture. Oxford University Press, 1939.)
10. *Copperbelt Markets*. By W. V. Brelsford. (Govt. Printer, 1947.)
11. *The Succession of Bemba Chiefs*. By W. V. Brelsford. (Govt. Printer, 1948.)
12. *Seven Tribes of British Central Africa*. Edited by E. Colson and Max Gluckman. (Oxford University Press, 1951.)
13. *Labour Conditions in Northern Rhodesia*. By Major D. Orde-Browne. (Her Majesty's Stationery Office.)

C.—GENERAL

1. *Hunting Trips in Northern Rhodesia*. By Denis Lyell. (*The Field*, 1910.)
2. *A Pathfinder in South Central Africa*. By Rev. E. W. Chapman. (W. A. Hammond, 1910.)
3. *Big Game Hunting in North Eastern Rhodesia*. By Owen Letcher. (John Long, London, 1911.)
4. *Adventures Beyond the Zambesi*. By Mrs. F. Maturin. (Eveleigh Nash, 1913.)
5. *The Making of Rhodesia*. By H. Marshall Hole. (Macmillan and Co., 1926.)
6. *The Way of the White Fields in Rhodesia*. By Rev. E. W. Smith. (World Dominion Press, London, 1928.)
7. *Eighteen Years on Lake Bangweulu*. By J. E. Hughes. (*The Field*, 1933.)
8. *Autobiography of an Old Drifter*. By P. M. Clark. (George Harrap, 1936.)

9. *Chirupula's Tale*. By J. E. Stephenson. (Geoffrey Bles, 1937.)
10. *Elephants in Africa*. By F. Melland. (*Country Life*, 1938.)
11. *Africa Looks Ahead*. By W. S. Fisher and J. Hoyte. (Pickering and Inglis, 1938.)
12. *The Lake of the Royal Crocodiles*. By Eileen Bigland. (Hodder and Stoughton, 1939.)
13. *Plan for Africa*. By Rita Hindson. (Allen and Unwin, 1941.)
14. *The Northern Rhodesia Legislative Council*. By T. W. Davidson. (Faber and Faber, 1948.)
15. *Jungle Pathfinder*. By K. S. Rukavina. (Exposition Press, New York, 1950.)
16. *Native Administration in the British African Territories*. Vols. 2 and 4. By Lord Hailey. (H.M.S.O., 1951.)
17. *A Summary of the Provisional Geological Features of Northern Rhodesia*. By T. D. Guernsey. (1952.)
18. *A Prospector's Guide to Mineral Occurrences in Northern Rhodesia*. By T. D. Guernsey.
19. *Northern Rhodesia Handbook*. A Guide Book. Published by the Information Department, Lusaka.
20. *Copper Venture*. By Kenneth Bradley. (Max Parrish, 1952.)

D.—THE NORTHERN RHODESIA JOURNAL

Published twice a year, price 5s. per copy. Contains articles of general interest—history, natural history, memoirs, ethnology, etc., connected with Northern Rhodesia.

GOVERNMENT PUBLICATIONS OBTAINABLE FROM GOVERNMENT PRINTER, LUSAKA

The Crown Agents for Oversea Governments and Administrations, London, are agents for the sale of publications issued by the Northern Rhodesia Government.

A current list of publications is obtainable, free of charge, from the Government Printer, P.O. Box 136, Lusaka.

Africans in Industry, Report of Commission to Inquire into Advancement of. Reprint, 1952, 1s.

African Representative Council. Verbatim reports of proceedings, 1s.

Agricultural Bulletins—

- No. 1 of 1950—Tobacco Root Knot Nematode. By J. C. Collins, 1s.
- No. 2 of 1950—The Production of Flue-Cured Virginia Tobacco in Northern Rhodesia. By Allan Carr, 2s.
- No. 1 of 1951—Flue-Cured Virginia Tobacco. By J. C. Collins, 2s.
- No. 2 of 1951—Intensive Vegetable Growing for Africans. By B. C. Wills, 1s.
- No. 3 of 1951—The Line Level and its Use in Soil Conservation. By M. Halcrow, 1s.
- No. 4—A Labour Saving Method of Compost Making. By J. R. E. Hindson, 1s.
- No. 5—European Tenant Farming with Special Reference to Sharecropping in Northern Rhodesia. By M. Halcrow, 1s.
- No. 6—The Production of Turkish Tobacco in Northern Rhodesia. By J. C. Collins, 3s.

- Agriculture*. Report on Agricultural Industry, October, 1931, 2s.
- Agricultural Survey*. Report of Commission, 1929 (postage 8d.), 7s. 6d.
- Annual Reports on Northern Rhodesia*. Issued by the Colonial Office, 2s. 6d.
- Bemba Chiefs*. By W. V. Brelsford, 1948, 3s. 6d.
- Brickmaking*. By C. W. Kiln, 1s.
- Cattle Industry*. Memorandum compiled by Veterinary Department, 1937, 1s.
- Careers for Northern Rhodesians*. Prepared by Central Careers Committee, 1952, 6d.
- Census of Population*. October, 1946, 7s. 6d.
- Census of Population*. May, 1951, 1s.
- Central African Council*:
- Report of Organisation and Research*. By Dr. J. E. Keyston, 1949, 5s.
- Central African Territories, Report of*:
- Comparative Survey of Native Policy*, 1951, 2s.
- Conference on Closer Association*, 1951, 1s. 3d.
- Geographical, Historical and Economic Survey*, 1951, 1s. 3d.
- Civil Service of Northern Rhodesia*. Report of Commission to Inquire into the Salary, Structure, Remuneration and Terms of Service, 1952. Part I (European), 2s.; Part II (African), 3s.
- Co-operative Digest*. By J. L. Boyd Wilson. 2nd Ed., 1952, 2s. 6d.
- Copperbelt Markets*. By W. V. Brelsford, 2s.
- Cost of Living*. Final Report of the Commission, 1950, 5s.
- Development Authority Report*. 1951, 2s.
- Development, The Ten-year Plan*. February, 1947, 2s.
- Development, The Ten-year Plan*. Second (1951) Review. November, 1951, 5s.
- Development, Industrial*. 1946, 2s.
- Development of Secondary Industries*. By Dr. W. J. Busschau, 1945, 2s. 6d.
- Departmental Annual Reports*. 1s. to 2s. 6d. each. (Apply to Government Printer for list.)
- Draft Federal Scheme*:
- Report of Conference, London, April and May, 1952, 1s. 3d.
- Reports of Commissions appointed by Governments of United Kingdom, Southern Rhodesia, Northern Rhodesia, and Nyasaland:
- Judicial Commission, 6d.
- Fiscal Commission, 1s. 3d.
- Civil Service Preparatory Commission, 2s.
- Economic and Statistical Bulletin*. Published monthly by the Central African Office of Statistics, Salisbury, 1s.
- Education of Women and Girls*. Report, 6d.
- Estimates, Approved, for 1953*. 10s.
- Estimates, Approved, Development Fund*, 1953. 4s.
- European Education, Further Secondary*. 1946, 6d.
- European Education*. Investigation by Committee, 1948, 2s. 6d.
- European Housing*. Report of Committee, 1947, 1s.
- Fish Culture*. By T. Vaughan-Jones, Director of Game and Tsetse Control, 1947, 1s.

Forestry Handbook. Issued by Forestry Department, 1952, 10s. 6d.

Gazette, Official Government. Published weekly:

Within Northern Rhodesia and all other countries, annual subscription, 25s.

Single copies for current year, 1s.

Back numbers, 1s. 6d. per copy.

General List of Chiefs, 1951. 2s.

Geological Features of Northern Rhodesia. A Summary of the Provisional, by T. D. Guernsey, 5s.

Hansard. Verbatim reports of the Proceedings of the Legislative Council. Published weekly in booklet form. Index issued at conclusion of Session.

Price, per weekly copy . . . 6d. post free.

Index 6d. post free.

Annual Subscription . . . 5s. post free.

Comprehensive Hansard, paper-bound, covering full Session, 2s. 6d. per copy (no fixed annual subscription).

Illegal Brewing. Report of Inquiry, 1s.

Import and Export List, 1950, *Official*. 2s.

Information for Intending Settlers. Land Board. (Obtainable from the Secretary, Land Board, Lusaka.)

Kafue River, Report on the Possibilities of Development of. By Brig. C. G. Hawes, 1952, 15s.

Land Bank. Committee Report Advising on Problems connected with the Establishment of in Northern Rhodesia. June, 1951, 2s. 6d.

Land Board. Constitution and Terms of Reference, 2s.

Laws of Northern Rhodesia. Revised to 31st December, 1953:

Contained in seven loose-leaf volumes, £10 10s.

Annual subscription, £2 2s.

Separate Acts available (apply to Government Printer for list.)

Law Reports of Northern Rhodesia. Cases Determined by the High Court. (Volumes I, II and III out of print.) Volume IV (1948), £1 1s.

Licence and Stamp Ordinance, Operation of. Report of Committee, 1947, 5s.

Maize Production, Cost of. Report of Committee, 1948, 6d.

Management Boards, Constitution of. 1949, 2s.

Mining and Explosives Regulations. 1950, 2s.

Motor Transport Commission, Report of. 1951, 2s. 6d.

Native Locations in Urban Areas. Report of Commission, 1943, 2s.

Native Taxation. Report of Committee, 1948, 1s.

Police Commission. Report of Commission of Inquiry, June, 1946, 7s. 6d.

Proposed Forty-hour Week in the Copper Mining Industry. 2s.

Register of Voters. 1s.

Semi-permanent Housing. By Desmond Agg, 5s.

Silicosis Hazard. Report of Investigation, 1948, 1s.

Small Earth Dam Construction. By T. W. Longridge, 1s.

Status and Welfare of Coloured Persons. 2s.

Study of an African Swamp. Report of Cambridge University Expedition to Bangweulu Swamps, Northern Rhodesia, 1949. By F. Debenham, £1.

Tariff of Customs and Excise Duties. January, 1952, 2s. 6d.

Trade of Northern Rhodesia, Statement of. 1951, £1 1s.

Vegetation and Soil Map of Northern Rhodesia. Compiled by C. G. Trapnell, 5s.

Water Reconnaissance. By Professor F. Debenham, 2s.

PUBLICATIONS OF THE RHODES-LIVINGSTONE
MUSEUM, LIVINGSTONE

The publications of the Museum include an annual report, a handbook to the ethnological collections, which is at present being brought up to date by the Ethnographer, and a series of occasional papers. Those which have appeared already or are in the press are—

- The Material Culture of the Fort Jameson Ngoni.* By J. A. Barnes. 1948.
African Dances of Northern Rhodesia. By W. V. Brelsford. 1948.
The Material Culture of the Lunda-Lovale Peoples. By C. M. White. 1948.
African Music in Northern Rhodesia and some other places. By A. M. Jones. 1949.
Trade Routes, Trade and Currency in East Africa. By A. H. Quiggin. 1949.
Life Among the Cattle-Owning Plateau Tonga. By E. Colson. 1949.
The Discovery of Africa. By E. H. Lane-Poole. 1950.
Some Pioneer Missions of Northern Rhodesia and Nyasaland. By C. W. Mackintosh. 1950.
David Livingstone. Based on an Account by I. M. Fletcher. 1950.
Lunda Rites and Ceremonies. By V. W. Turner.
The Stone Age Cultures of Northern Rhodesia. By J. Desmond Clark. Published by the South African Archæological Society with the aid of a grant from the Museum Trustees.

PUBLICATIONS OF THE RHODES-LIVINGSTONE
INSTITUTE, LUSAKA

Paper

1. *The Land Rights of Individuals Among the Nyakyusa.* Godfrey Wilson. 1938. 52 pp. Out of print.
2. *The Study of African Society.* Godfrey Wilson and Monica Hunter. First printing, 1939. Second printing, 1942. 21 pp. Out of print.
3. *The Constitution of Ngonde.* Godfrey Wilson. 1939. 16 pp. Out of print.
4. *Bemba Marriage and Present Economic Conditions.* Audrey I. Richards. 1940. 123 pp. Out of print.
5. *An Essay on the Economics of Detribalisation in Northern Rhodesia.* Part I. Godfrey Wilson. 71 pp. Out of print.
6. *An Essay on the Economics of Detribalisation in Northern Rhodesia.* Part II. Godfrey Wilson. 1942. 82 pp. 8 tables. Out of print.
7. *Economy of the Central Barotse Plain.* Max Gluckman. 1941. 130 pp. 24 photographs, 2 maps, 4 diagrams, 8 charts. Out of print.
8. *Good Out of Africa.* (A Study in the Relativity of Morals.) A. T. Culwick. 64 pp. First printing, 1942. Second printing, 1943. 2s. (postage 1d.).
9. *The African as Suckling and as Adult.* (A Psychoanalytical Study.) J. F. Ritchie. 99 pp. Out of print.
10. *Essays on Lozi Land and Royal Property.* Max Gluckman. 1943. 99 pp. Out of print.
11. *Some Aspects of Marriage and the Family Among the Nuer.* E. E. Evans-Pritchard. 1945. 2s. (postage 1d.).
12. *Fishermen of the Bangweulu Swamps.* W. V. Brelsford. 1948. 169 pp., photographs, maps, charts. 5s. (postage 5d.).

13. *Rooyard*. (A Sociological Survey of an Urban Native Slum Yard.) Ellen Hellmann. 1948. 125 pp., 1 diagram, 19 photographs. 7s. 6d. (postage 6d.).
14. *Land Holding and Land Usage among the Plateau Tonga of Mazabuka District*. (A Reconnaissance Survey, 1945.) W. Allan, M. Gluckman, D. U. Peters, C. G. Trapnell, J. H. M. McNaughton, D. W. Conroy. 1948. 192 pp., 4 maps, 47 tables. 8s. 6d.
15. *Studies in African Land Usage in Northern Rhodesia*. William Allan. 85 pp., maps, tables, diagrams. 7s. 6d. (postage 2d.).
16. *Malinowski's Social Theories*. M. Gluckman. 28 pp. 3s. (postage 1d.).
17. *The Pattern of Hera Kinship*. J. F. Holleman. 58 pp. 6s. (postage 2d.).
18. *Gusii Bridewealth Law and Custom*. Philip Mayer. 67 pp. 6s. 6d. (postage 2d.).
19. *Land Usage in Serenje District*. D. U. Peters. 99 pp. 10s. 6d. (postage 2d.).
20. *Marriage in a Changing Society*. J. A. Barnes. 139 pp. 10s. 6d. (postage 2d.).
21. *History on the Luapula*. I. G. Cunnison.
22. *Accommodating the Spirit*. J. F. Holleman. 1952. 7s. 6d. (postage 2d.).

HUMAN PROBLEMS IN BRITISH CENTRAL AFRICA RHODES-LIVINGSTONE JOURNALS

Nos. 2, 3 and 4, 2s. 6d. each, plus postage.

Nos. 5—10, 4s. each, plus postage.

Nos. 11—13, 5s. each, plus postage.

PUBLICATIONS OF THE NORTHERN RHODESIA AND NYASALAND PUBLICATIONS BUREAU

The Bureau exists to produce books in English and the vernacular for Africans. It also produces or assists publishers in the production of a number of grammars and dictionaries.

Complete lists of its publications are obtainable, free of charge, from the Publications Bureau, P.O. Box 208, Lusaka. The following is a selection:

1. *Travels in Northern Rhodesia*. By D. Maxwell Robertson. (Oxford University Press, 4s. and 7s.).
2. *The Story of Northern Rhodesia*. By Kenneth Bradley. (Longmans, 3s.)
3. *North of the Zambezi*. By L. F. G. Anthony. (Publications Bureau, 3s. 6d. and 5s.)
4. *Common Birds of the Bush*. By J. M. Winterbottom. (Longmans, 5s.)
5. *Common Birds of the Waterways*. By J. M. Winterbottom. (Longmans, 5s.)
6. *More Common Birds of the Bush*. By J. M. Winterbottom. (Longmans, 6s.)
7. *English-Bemba Phrase Book*. (Macmillan, 2s.)
8. *English-Lozi Phrase Book*. (Macmillan, 2s.)
9. *English-Tonga Phrase Book*. (Macmillan, 2s.)
10. *Nyanja Note Book*. By Michael Russell. (Longmans, 1s. 6d.)
11. *Chibemba Note Book*. By Commander T. S. L. Fox-Pitt, R.N. (RETD.), O.B.E. (Longmans, 1s. 9d.)
12. *Dictionary of the Nyanja Language*. By D. C. Scott, D.D., M.A., and Alexander Hetherwick, C.B.E., M.A. (Lutterworth Press, 15s.)
13. *Lessons in Bemba*. By William Lammond. (Publications Bureau, 6s.)
14. *A Short Lwena Grammar*. By C. M. N. White. (Longmans, 4s. 3d.)
15. *A Practical Introduction to Tonga*. By C. R. Hopgood. (Longmans, 15s.)
16. *Simple Silozi*. By W. A. R. Gorman. (Longmans, 3s. 6d.)

APPENDICES

APPENDIX I
THE TEN-YEAR DEVELOPMENT PLAN OF NORTHERN RHODESIA
ESTIMATE OF EXPENDITURE TO 30TH JUNE, 1954
SUBJECTS DESIGNATED AS A FEDERAL RESPONSIBILITY

	Estimate of total cost £	Total expenditure to 31-12-54 £	Colonial Development and Welfare Funds £	Northern Rhodesia Development Account £	Loan £
HEALTH:					
Kitwe Hospital	854,000	68,738	—	—	68,738
Extension—African Medical Education	510,000	16,974	—	16,974	—
Rural Hospitals	115,000	46,091	46,091	—	—
Cottage Hospitals	33,400	33,400	—	33,400	—
Lusaka European Hospital	535,000	36,450	—	36,450	—
Broken Hill Hospital	800,000	800,000	—	650,000	150,000
Balovale Hospital	41,000	41,000	—	41,000	—
Mental Hospital—Stage 1	250,000	50,000	—	50,000	—
Livingstone Hospital	230,000	10,000	—	—	10,000
Choma African Hospital	57,000	57,000	—	—	57,000
Chikankata Hospital	15,000	—	—	—	—
European Staff Quarters—African Hospital, Lusaka	30,000	7,000	—	—	7,000
Rural Health Centres	34,000	33,510	17,000	16,510	—
Stainless Steel Equipment	20,000	20,000	—	20,000	—
Extension—Mine Hospitals	20,440	—	—	—	—
Entomological Laboratory	21,000	—	—	—	—
EDUCATION—EUROPEAN:					
Secondary Schools:					
Luanshya	200,000	30,000	—	—	30,000
Lusaka	1,138,700	561,550	—	—	561,550
Stage 1 at Mufulira, Broken Hill, Ndola, Chingola, Kitwe	600,000	150,000	—	30,000	120,000
Primary Schools:					
Chingola	110,000	50,000	—	—	50,000
Kitwe	65,000	40,000	—	40,000	—
Lusaka Boys	100,000	70,000	—	30,000	40,000
Luanshya	70,000	30,000	—	30,000	—
Broken Hill	70,000	30,000	—	30,000	—
Mufulira	70,000	30,000	—	30,000	—
Various Extensions	17,050	17,050	—	17,050	—
Infants' Schools:					
Kitwe (2)	116,680	61,680	—	—	61,680
Livingstone	68,000	5,000	—	—	5,000
Lusaka (3)	126,250	45,435	—	29,950	15,485

Ndola	68,000	68,000	—	68,000	—
Broken Hill	67,870	67,870	—	—	67,870
Luanshya	67,870	67,870	—	—	67,870
Mufulira	67,870	67,870	—	—	67,870
Chingola	62,000	62,000	—	—	62,000

Rural Schools:

Emmasdale	23,800	18,800	—	—	18,800
Fort Jameson and Hostel	99,300	55,000	—	55,000	—
Silver Rest and Hostel	101,100	60,000	—	60,000	—
Codrington and Hostel	140,000	25,000	—	25,000	—
Chilanga	25,000	23,500	—	23,500	—
Technical Centres	50,000	19,000	—	19,000	—
Various Extensions to Existing Schools	158,295	103,295	—	15,000	80,292
Hostels	456,952	199,952	—	50,000	149,952
Indian Schools	58,860	56,388	—	56,388	—
Coloured Schools	43,000	37,500	—	16,000	21,500

ROADS AND BRIDGES:

Livingstone-Kafue	1,387,828	433,227	—	286,720	146,507
Chirundu-Kapiri Mposhi	1,518,321	1,490,648	277,778	629,752	583,118
Kapiri Mposhi-Ndola	600,000	50,000	—	—	50,000
Kapiri Mposhi-Tunduma	750,000	448,918	—	448,918	—
Livingstone-Ndola Road Investigations	17,898	17,898	—	17,898	—
Great East Road	171,251	51,251	—	—	51,251
Chingola-Solwezi	45,000	17,688	—	17,688	—
Widening Copperbelt and Other Roads	200,000	90,000	—	90,000	—
Bridges and Culverts	50,000	43,500	—	—	43,500
Mwambeshi-Chingola	56,577	55,833	—	—	55,833

POSTS AND TELEGRAPHS:

Linking District Headquarters by Radio	40,499	40,499	—	40,499	—
Lusaka Telephone Exchange	48,759	49,759	—	48,759	—
Mechanisation of Savings Bank and Main Post Offices	19,000	14,730	—	14,730	—
Rural Post Offices	55,350	44,870	—	44,870	—
Branch and New Post Offices	15,050	15,050	—	15,050	—
Additional Trunk Outlets	139,650	114,126	—	114,126	—
Automatic Telephone Extensions	64,920	59,000	—	59,000	—
Radio Telephone Circuit—Lusaka, Fort Jameson, Zomba	38,300	38,300	—	38,300	—
Rural Telephone Installations	42,058	42,057	—	42,057	—
Extensions to Telephone Services to Mine Townships	84,000	83,999	—	83,999	—
Additional Wireless Stations	2,308	2,308	—	2,308	—
Additional Cables, Lusaka	7,025	7,024	—	7,024	—
Recabling Lusaka	14,000	14,000	—	14,000	—
Livingstone-Victoria Falls Cable	11,000	11,000	—	11,000	—
Ndola Cables, V.H.F.	16,000	16,000	—	16,000	—
Main Trunk Telephones	149,000	149,000	—	—	149,000
Lusaka-Chirundu-Salisbury Trunk	35,000	35,000	—	—	35,000
New Post Office, Lusaka	140,000	30,000	—	30,000	—

APPENDIX 1—continued

THE TEN-YEAR DEVELOPMENT PLAN OF NORTHERN RHODESIA

ESTIMATE OF EXPENDITURE TO 30TH JUNE, 1954

SUBJECTS DESIGNATED AS A FEDERAL RESPONSIBILITY

	Estimate of total cost £	Total expenditure to 31-12-54 £	Colonial Development and Welfare Funds £	Northern Rhodesia Development Account £	Loan £
New Post Office, Broken Hill	38,000	10,000	—	10,000	—
New Post Office, Kafue	18,000	10,000	—	10,000	—
BUILDING: GENERAL:					
New Military Cantonment, Bwana Mkubwa	800,000	100,000	—	—	100,000
Silicosis Bureau	50,000	50,000	—	—	50,000
PRISONS:					
General Building	250,500	97,476	—	—	97,476
AERODROMES:					
Livingstone Airport	968,515	968,515	—	103,515	865,000
Solwezi Aerodrome	7,000	3,500	—	3,500	—
SUBJECTS DESIGNATED AS A TERRITORIAL RESPONSIBILITY					
AFRICAN EDUCATION:					
Government School Buildings (D 894)	1,034,978	554,934	312,400	242,534	—
Building Grants to Missions (D 894)	182,156	120,498	120,498	—	—
Building Grants to Village Schools (D 894)	179,424	138,584	138,584	—	—
Capital Expenditure—Development Area Schools (D 894)	54,529	43,139	43,139	—	—
Mass Literacy	5,222	3,822	3,600	222	—
African Secondary School	234,000	234,000	—	147,000	87,000
Industrial Training Centre	52,000	18,000	—	18,000	—
Technical School, Munali	11,133	11,133	—	—	11,133
TOURIST DEVELOPMENT:					
Rest Houses and Camps	13,700	11,000	—	—	11,000
Tourist Office, Livingstone	3,881	1,359	—	1,243	116
AGRICULTURE:					
Research Service	97,900	22,340	—	22,340	—
Extension Services Field Operations	178,190	154,218	123,375	30,843	—
Training for Africans	61,449	61,449	61,449	—	—
Extension Services for African Agriculture	128,000	97,812	97,812	—	—
Soil Conservation	207,005	197,784	—	97,784	100,000
FORESTRY:					
Forest School	60,000	51,200	43,000	8,200	—
Forest Development	214,660	170,160	75,160	95,000	—

Survey of Timber Resources	.	.	.	.	.	.	.	.	.	60,000	43,869	—	—
Forest Research Stations	.	.	.	.	.	.	.	.	.	57,300	—	13,633	—
GAME AND TSETSE:													
Expansion of Departmental Services	.	.	.	.	.	.	.	.	.	212,399	174,984	174,984	—
Tsetse Survey Field Research Unit (R 343)	.	.	.	.	.	.	.	.	.	8,308	6,474	6,474	—
Fish Farming	.	.	.	.	.	.	.	.	.	78,893	49,878	12,045	—
Kafue National Park	.	.	.	.	.	.	.	.	.	63,000	28,258	28,258	—
Minor Scheme, Tsetse Control and Research	.	.	.	.	.	.	.	.	.	29,142	29,000	29,000	—
Tsetse Control	.	.	.	.	.	.	.	.	.	93,994	84,711	42,855	—
RURAL DEVELOPMENT:													
Development Centre	.	.	.	.	.	.	.	.	.	136,698	104,273	96,075	—
Development Areas	.	.	.	.	.	.	.	.	.	220,569	177,372	88,803	—
Rural Development Projects	.	.	.	.	.	.	.	.	.	355,000	233,765	116,882	—
Nutrition and Health Scheme	.	.	.	.	.	.	.	.	.	70,067	28,597	28,597	—
Community Development Centre	.	.	.	.	.	.	.	.	.	15,500	11,000	—	—
Peasant Farming Fund	.	.	.	.	.	.	.	.	.	140,500	140,500	107,000	—
WATER DEVELOPMENT:													
Water Supplies	.	.	.	.	.	.	.	.	.	1,209,472	945,101	945,101	—
Irrigation	.	.	.	.	.	.	.	.	.	264,572	119,757	119,757	—
LOANS TO LOCAL AUTHORITIES	.	.	.	.	.	.	.	.	.	5,500,000	1,750,000	1,250,000	500,000
ECONOMIC DEVELOPMENT:													
Loans to Co-operative Societies	.	.	.	.	.	.	.	.	.	120,000	46,250	28,750	17,500
Tobacco Advisers	.	.	.	.	.	.	.	.	.	15,192	11,408	11,408	—
Pilot Ground-nut Scheme, Mumbwa	.	.	.	.	.	.	.	.	.	80,000	68,854	68,854	—
Kafue Flats Survey	.	.	.	.	.	.	.	.	.	21,000	21,000	21,000	—
Hydro-Electric Power Investigations	.	.	.	.	.	.	.	.	.	100,000	82,979	82,979	—
PUBLIC UTILITIES:													
Lusaka Water Scheme	.	.	.	.	.	.	.	.	.	872,800	737,800	737,800	—
Lusaka Electricity Supply	.	.	.	.	.	.	.	.	.	678,438	460,893	355,893	105,000
Livingstone Hydro-Electric Scheme	.	.	.	.	.	.	.	.	.	326,684	83,890	83,890	—
Lusaka Sewerage Scheme	.	.	.	.	.	.	.	.	.	500,000	192,757	192,757	—
No. 2 Power Station, Lusaka	.	.	.	.	.	.	.	.	.	850,000	60,000	—	60,000
AFRICAN HOUSING	.	.	.	.	.	.	.	.	.	6,550,000	4,494,000	2,633,000	1,500,000
GENERAL BUILDING (PUBLIC WORKS):													
European Staff Housing	.	.	.	.	.	.	.	.	.	5,745,287	4,773,287	3,648,287	1,125,000
Stores Buildings	.	.	.	.	.	.	.	.	.	239,556	221,770	144,270	77,500
Government Offices and Grounds, Lusaka	.	.	.	.	.	.	.	.	.	568,215	403,063	30,000	373,063
Samfya Development	.	.	.	.	.	.	.	.	.	51,920	46,895	46,895	—
Aged Persons' Home	.	.	.	.	.	.	.	.	.	32,750	30,000	5,000	25,000
Public Works Department Workshops	.	.	.	.	.	.	.	.	.	64,000	64,000	—	64,000
Plant and Equipment	.	.	.	.	.	.	.	.	.	45,728	45,728	—	45,728
Public Works Department—Special Staff	.	.	.	.	.	.	.	.	.	14,981	14,981	—	14,981

APPENDIX I—continued

THE TEN-YEAR DEVELOPMENT PLAN OF NORTHERN RHODESIA

ESTIMATE OF EXPENDITURE TO 30TH JUNE, 1954

SUBJECTS DESIGNATED AS A TERRITORIAL RESPONSIBILITY

	Estimate of total cost £	Total expenditure to 31-12-54 £	Colonial Development and Welfare Funds £	Northern Rhodesia Development Account £	Loan £
PUBLIC WORKS DEPARTMENT:					
Staff	1,900,000	873,300	—	873,300	—
ROADS AND BRIDGES:					
Grants to District Road Boards	575,000	327,860	—	327,860	—
Great North Road to Chisamba II	16,800	16,800	—	16,800	—
Fort Rosebery-Samfya III	16,500	5,000	—	5,000	—
Kawambwa-Kasama III	49,500	5,000	—	5,000	—
Kasama-Isoka	26,000	—	—	—	—
Investigations and Surveys	40,000	39,998	—	20,000	19,998
Kabulonga Road I	7,500	7,500	—	7,500	—
Mufulira-Ndola I	127,000	119,104	—	—	119,104
Improvements to District Roads III and IV	150,000	100,000	—	100,000	—
Class II, III and IV	263,008	156,108	—	—	156,108
Mufulira-Kirwe I	24,319	24,319	—	—	24,319
Bridges and Culverts	100,000	81,359	—	—	81,359
Plant and Equipment	180,353	180,353	—	—	180,353
Staff	13,613	13,613	—	—	13,613
Central African Airways	308,000	308,000	—	—	308,000
PUBLICATIONS:					
Loans for Financing Book Distribution	14,300	6,000	—	6,000	—
VETERINARY:					
Capital Works and Additional Equipment and Staff	124,198	83,443	—	83,443	—
Disease Eradication	51,835	32,662	32,662	—	—
Livestock Improvements and Management	45,055	24,485	24,485	—	—
Research into Disease of Animals (Capital)	12,556	7,487	7,487	—	—
Animal Husbandry Research and Demonstration	17,500	11,451	11,451	151	—
Pasture Management	16,150	7,065	6,331	734	—
Grass Drying	12,875	8,888	—	2,167	—
T.I.F.A. Fog Spray	3,887	3,679	6,721	3,679	—
Import of Cattle from Tanganyika	20,000	9,782	—	9,782	—
POLICE:					
Livingstone Police Stations and Drill Hall	122,450	—	—	—	—
Mazabuka Police Station	13,600	—	—	—	—
Chilanga Police Station	24,800	—	—	—	—
Broken Hill Mine Police Sub-station	54,000	—	—	—	—

Lusaka Police Stations and Drill Hall	.	.	.	.	.	123,640	5,000	—	5,000	—
Ndola Police Station and Drill Hall	.	.	.	.	.	117,700	—	—	—	—
Luanshya Police Sub-Station and Drill Hall	.	.	.	.	.	29,800	5,000	—	—	—
Mufulira Police Camp and Drill Hall	.	.	.	.	.	97,434	5,000	—	5,000	—
Chingola Police Reserve Drill Hall	.	.	.	.	.	5,000	5,000	—	5,000	—
Samfya Police Station	.	.	.	.	.	25,000	—	—	—	—
Kashiba Police Station	.	.	.	.	.	25,000	—	—	—	—
Sinde Misale Police Station	.	.	.	.	.	16,950	—	—	—	—
Police Posts in Farming Areas	.	.	.	.	.	14,410	—	—	—	—
Rural Police Stations	.	.	.	.	.	105,000	—	—	—	—
European Police Single Quarters	.	.	.	.	.	75,000	—	—	—	—
JUDICIAL:										
Lusaka—High Court	.	.	.	.	.	350,000	10,000	—	10,000	—
Livingstone—High Court Extensions	.	.	.	.	.	10,000	—	—	—	—
Ndola—High Court Extensions	.	.	.	.	.	20,000	—	—	—	—
General—Magistrates' Court Extensions	.	.	.	.	.	20,000	—	—	—	—

APPENDIX II

POPULATION STATISTICS

Table I

POPULATION AT CENSUS DATES

<i>Census date</i>	<i>Census Results</i>			<i>Population Estimates</i>	
	<i>European</i>	<i>Asiatic</i>	<i>Coloured</i>	<i>Domiciled indigenous Africans</i>	<i>Total</i>
7th May, 1911 .	1,497	39	(b)	820,000(a)	821,536
3rd May, 1921 .	3,634	56	145	980,000	983,835
5th May, 1931 .	13,846	176	425	1,330,000	1,344,447
15th October, 1946	21,907(c)	1,117	804	1,660,000	1,683,828
8th May, 1951 .	37,221	2,529	1,092	1,700,577	1,741,419

(a) Including Coloureds.

(b) Included with Africans.

(c) Including 3,181 Polish evacuees in camp.

APPENDIX II—*continued*

Table II

ANNUAL POPULATION ESTIMATES, 1912-1952

(Based on estimates of the British South Africa Company from 1912 to 1923 and estimates of the Northern Rhodesia Government from 1924 onwards.)

<i>Year ended 30th June</i>	<i>European</i>	<i>Asiatic and Coloured</i>	<i>African</i>
1912	1,700	(a)	830,000
1913	2,100	(a)	840,000
1914	2,300	(a)	870,000
1915	2,000	(a)	860,000
1916	2,100	(a)	870,000
1917	2,200	(a)	880,000
1918	2,400	(a)	900,000
1919	2,600	(a)	930,000
1920	3,000	(a)	950,000
1921	3,700	200	980,000
1922	3,700	200	980,000
1923	3,700	300	980,000
1924	4,000	300	1,050,000
1925	4,400	400	1,130,000
1926	5,100	400	1,170,000
1927	6,600	400	1,220,000
1928	7,400	500	1,260,000
1929	8,700	500	1,280,000
1930	11,100	600	1,310,000
1931	13,800	600	1,350,000
1932	11,000	700	1,380,000
1933	10,700	700	1,380,000
1934	11,500	800	1,370,000
1935	10,700	800	1,370,000
1936	10,000	900	1,400,000
1937	11,300	1,000	1,430,000
1938	13,000	1,100	1,450,000
1939	13,100	1,300	1,480,000
1940	14,300	1,400	1,500,000
1941	15,100	1,400	1,530,000
1942	14,800	1,300	1,560,000
1943	18,000	1,600	1,580,000
1944	19,200	1,700	1,610,000
1945	20,800	1,700	1,630,000
1946	21,800	1,900	1,520,000
1947	25,100	2,100	1,550,000
1948	28,800	2,300	1,580,000
1949	32,000	2,800	1,610,000 (b)
1950	36,000	3,100	1,849,600 (b)
1951	38,200	3,700	1,905,000 (b)
1952	43,000	4,300	1,930,000 (b)
1953	50,000	5,000	1,960,000

(a) Not available.

(b) Provisional.

APPENDIX II—*continued**Table III*EUROPEAN BIRTHS, DEATHS, MARRIAGES AND
INFANT MORTALITY, 1938-1953

Year	Births		Marriages	Deaths		Infant mortality	
	No.	Per 1,000		No.	Per 1,000	No.	Per 1,000 Live births
1938 .	355	27.31	137	131	10.08	10	20.47
1939 .	378	28.85	167	108	8.24	7	18.50
1940 .	520	36.36	187	108	7.55	15	30.06
1941 .	490	32.45	157	137	9.07	13	26.53
1942 .	559	37.77	174	131	8.85	17	30.45
1943 .	501	27.83	182	136	7.56	17	32.69
1944 .	586	30.52	169	162	8.44	25	42.68
1945 .	602	28.93	194	153	7.36	21	36.65
1946 .	650	29.81	211	155	7.11	25	38.46
1947 .	740	29.48	292	171	6.81	33	44.59
1948 .	840	29.17	315	158	5.56	27	32.14
1949 .	867	27.09	265	160	5.00	21	27.68
1950 .	1,060	29.44	334	187	5.19	27	25.50
1951 .	1,219	28.14	382	238	5.80	38	31.21
1952 .	1,318	31.00	385	225	5.00	50	24.5
1953 .	1,450	29.00	383	270	5.00	49	28.3

APPENDIX III

Table I

INCOME TAX

Rates of Tax:

<i>Unmarried:</i>	<i>s.</i>	<i>d.</i>
For every pound of the first £250 . . .	1	0
For every pound of the next £250 . . .	2	0
For every pound of the next £250 . . .	3	0
For every pound of the next £250 . . .	4	0
For every pound of the next £250 . . .	5	0
For every pound of the next £250 . . .	6	0
For every pound of the next £250 . . .	7	0
For every pound in excess of £1,750 . . .	7	6

<i>Married:</i>	<i>s.</i>	<i>d.</i>
For every pound of the first £250 . . .	1	0
For every pound of the next £250 . . .	1	6
For every pound of the next £200 . . .	2	6
For every pound of the next £200 . . .	3	0
For every pound of the next £200 . . .	4	0
For every pound of the next £200 . . .	5	0
For every pound of the next £500 . . .	6	0
For every pound of the next £500 . . .	7	0
For every pound in excess of £2,300 . . .	7	6

The Company rate of tax is 7s. 6d. in the £.

Table II

TAX PAYABLE BY INDIVIDUALS

<i>Income</i>	<i>Unmarried</i>	<i>Married no children</i>	<i>Married two children</i>
£	£ s. d.	£ s. d.	£ s. d.
400	2 10 0	—	—
500	7 10 0	—	—
600	12 10 0	—	—
700	22 10 0	—	—
800	32 10 0	5 0 0	—
900	45 0 0	10 0 0	—
1,000	60 0 0	16 5 0	—
1,100	75 0 0	23 15 0	5 0 0
1,200	95 0 0	31 5 0	10 0 0
1,300	115 0 0	43 15 0	16 5 0
1,400	137 10 0	56 5 0	23 15 0
1,500	162 10 0	71 5 0	31 5 0
2,000	315 0 0	176 5 0	106 5 0
2,500	500 0 0	326 5 0	236 5 0
3,000	687 10 0	501 5 0	396 5 0

APPENDIX III—*continued**Table III*

ESTATE DUTY

<i>Where the principal value of the estate exceeds</i>	<i>And does not exceed</i>	<i>Estate duty shall be payable at the rate of</i>
£	£	
2,000	5,000	1 per cent.
5,000	7,500	2 per cent.
7,500	10,000	3 per cent.
10,000	20,000	4 per cent.
20,000	40,000	5 per cent.
40,000	70,000	6 per cent.
70,000	100,000	7 per cent.
100,000	200,000	8 per cent.
200,000	300,000	9 per cent.
300,000		10 per cent.

Where an estate is inherited by a surviving spouse, half the above rates only are charged on the first £10,000.

APPENDIX IV

Table I

COMPARATIVE STATEMENT OF REVENUE FOR THE PAST SIX YEARS

Head of Revenue		1948	1949	1950	1951	1952	1953
		£	£	£	£	£	Estimates
ORDINARY:							£
1.	Customs	976,725	1,697,913	1,723,677	2,394,763	2,836,680	3,010,000
2.	Licences, Taxes, etc.	4,484,652	7,008,211	8,208,288	10,519,123	18,749,406	22,450,250
3.	Specific Services	340,267	488,881	526,883	640,360	707,065	798,175
4.	Post Office	164,124	193,551	207,081	285,579	350,782	406,300
5.	Rent from Government Property	22,076	19,711	24,486	31,259	36,747	31,650
6.	Interest and Loan Repayments	194,772	262,886	351,705	474,736	1,456,879	1,249,460
7.	Miscellaneous	94,040	168,530	781,358	77,854	136,925	46,810
8.	Share of Revenue from Mineral Rights	—	—	—	1,331,142	1,678,512	2,300,000
9.	Lusaka Electricity and Water Undertakings	31,059	34,607	44,442	58,330	76,459	11,784
10.	Water Supplies	(a)	(a)	(a)	(a)	(a)	6,280
11.	Land Sales	9,247	13,467	21,885	23,040	35,085	30,000
	Advances to Development Fund Reimbursed	—	—	169,415	61,087	—	—
	Total Recurrent Revenue	6,316,962	9,887,757	12,059,220	15,897,273	26,064,540	30,340,709
DEVELOPMENT FUND:							
95.	Development and Welfare Schemes: Local Receipts	—	—	—	4,747	15,938	12,000
96.	Development and Welfare Schemes: Grants and Reimbursements	139,174	208,743	377,998	378,993	485,856	1,037,436
97.	Appropriations from Territorial Revenue	259,381	487,363	1,535,035	1,500,000	4,000,000	5,600,000
98.	Reimbursement from Other Governments	—	—	5,354	2,383	27,049	327,775
99.	Loan Appropriations	—	—	100	—	1,630,451	—
	Total Development Revenue	398,555	696,106	1,918,487	1,886,123	6,159,294	6,977,211

(a) Included under "Specific Services".

APPENDIX IV—continued

Table II

COMPARATIVE STATEMENT OF EXPENDITURE FOR THE PAST SIX YEARS

Head of Expenditure		1948	1949	1950	1951	1952	1953 Estimates
		£	£	£	£	£	£
RECURRENT EXPENDITURE:							
1. The Governor		12,528	13,567	13,737	12,837	15,773	16,843
2. Judicial		27,443	34,555	38,262	41,128	42,573	52,814
3. Audit		10,348	14,377	16,284	18,833	24,338	26,075
4. The Chief Secretary		(a)	(a)	(a)	(a)	2,200	2,200
5. Civil Aviation		90,966	97,070	98,129	145,248	140,086	147,969
6. Executive and Legislative Councils		(a)	(a)	(a)	(a)	37,051	44,511
7. Labour and Mines		21,580	49,548	60,015	64,836	65,352	81,622
8. Military		57,041	54,750	250,333	400,600	457,880	461,450
9. Minor Services under the Control of the Chief Secretary		—	—	—	17,436	30,254	31,790
10. Attorney-General		8,980	10,148	12,368	10,857	13,098	13,366
11. Administrator-General, Official Receiver and Custodian of Enemy Property		2,384	3,996	3,395	3,841	4,863	4,974
12. Northern Rhodesia Police		194,372	279,374	366,057	429,965	589,336	785,545
13. Prisons		55,406	74,844	79,306	101,880	107,058	131,855
14. The Financial Secretary		(a)	(a)	(a)	(a)	1,950	1,950
15. Accountant-General		24,462	39,624	40,547	47,952	57,295	57,563
16. Customs		87,189	37,823	42,316	46,363	50,434	60,378
17. Income Tax		18,871	11,002	12,167	14,781	18,890	28,426
18. Miscellaneous Services		1,332,853	1,895,593	1,984,721	2,510,892	4,181,300	2,865,876
19. Loans and Investments		(b)	346,910	257,887	633,844	850,800	364,493
20. Pensions and Gratuities		136,603	153,376	213,254	218,447	260,944	270,899
21. Posts and Telegraphs		139,172	183,864	278,140	344,209	464,093	712,488
22. Charges on Account of Public Debt		168,537	168,031	295,241	463,599	865,771	901,622
23. Subventions		295,019	109,796	30,311	139,607	35,471	39,658
24. Territorial Appropriations		—	2,250,000	2,207,675	4,462,204	9,780,315	12,142,000
25. Minor Services under the Control of the Financial Secretary		(a)	(a)	(a)	4,647	3,987	5,221
26. Secretary for Native Affairs		93,687	120,968	125,922	142,140	155,206	201,195
27. African Administration		48,685	55,144	43,247	40,692	24,383	2,623
28. African Labour Corps		225,532	288,875	312,728	325,760	377,690	404,267
29. Provincial Administration		—	—	—	—	—	—
30. Minor Services under the Control of the Secretary for Native Affairs		(a)	(a)	(a)	(a)	17,356	16,046
31. The Administrative Secretary		277,866	391,148	413,929	458,019	563,249	744,440
32. African Education		144,086	223,312	311,530	360,067	433,083	594,834
33. European Education		17,121	27,438	28,565	38,051	55,001	65,411
34. Information Department		—	—	—	—	—	—

35. Printing and Stationery	61,224	91,395	92,990	98,956	156,698	144,614
36. Secretariat	92,233	124,412	139,475	147,642	112,079	140,940
37. Welfare and Probation Services	(b)	(b)	(b)	(b)	24,352	131,049
38. Minor Service under the Control of the Administrative Secretary	—	—	—	47,791	40,644	55,773
39. The Economic Secretary	(a)	(a)	(a)	(a)	1,950	1,950
40. Department of Trade, Transport and Industry	23 727	35,373	45,495	59,941	59,863	55,842
41. Co-operative Societies (including Building Societies)	(a)	14,205	21,130	25,595	30,167	31,221
42. Surveys and Land	26,991	40,124	43,531	57,965	82,646	109,683
43. Minor Services under the Control of the Economic Secretary	—	—	—	43,362	25,412	69,927
44. The Development Secretary	(a)	(a)	(a)	(a)	1,950	1,950
45. Geological Survey Department	(c)	(c)	(c)	(c)	12,664	26,540
46. Lusaka Electricity and Water Undertakings	38,883	48,690	51,748	82,223	106,509	1
47. Public Works Department	126,989	250,010	292,373	342,462	371,476	467,124
48. Public Works Recurrent	210,882	430,255	526,865	663,340	837,287	989,983
49. Public Works Extraordinary	631,807	463,135	430,652	515,155	1,123,438	2,672,805
50. Stores	445,291	506,105	194,769	846,659	89,429	96,975
51. The Member for Agriculture and Natural Resources	(a)	(a)	(a)	(a)	2,000	2,000
52. Agriculture	67,230	92,339	111,546	171,562	281,316	350,712
53. Forestry	31,064	120,851	79,971	104,658	125,477	200,266
54. Game and Tsetse Control	33,136	53,092	70,457	82,592	92,708	125,181
55. Veterinary Services	83,209	85,407	110,963	127,586	143,053	186,073
56. Water Development and Irrigation	77,166	99,251	143,520	193,421	256,223	503,070
57. Minor Services under the Control of the Member for Agriculture and Natural Resources	—	—	—	15,898	17,541	39,905
58. The Member for Health and Local Government	(a)	(a)	(a)	(a)	2,000	2,000
59. Health	326,981	421,882	521,868	552,195	820,529	1,113,449
60. Local Government	38,895	16,610	84,152	10,743	9,940	13,334
61. Government Grants to Local Authorities	—	—	—	83,373	101,116	142,650
Minor Services under the Control of the Member for Health and Local Government	—	—	—	42,310	(f)	(f)
Mines	9,932	(d)	(d)	(d)	(d)	(d)
Minor Services	—	—	94,123	(e)	(e)	(e)
Total Recurrent Expenditure	5,816,371	9,828,269	10,591,694	15,830,760	24,659,447	28,959,321

DEVELOPMENT FUND:

97. Second Loan: Advances	—	—	—	—	5,747	787,500
98. Development and Welfare Schemes	392,084	772,188	—	—	—	—
(a) From Colonial Development and Welfare Funds	—	—	269,415	367,275	472,107	1,037,436
(b) On Northern Rhodesia Development Account	—	—	1,069,505	1,634,114	3,900,090	6,915,567
99. Loan Expenditure	—	—	2,213,311	1,225,548	826,210	759,418
Total Development Expenditure	392,084	772,188	3,552,231	3,226,937	5,204,154	9,499,921

(a) Included under "Secretariat". (b) Included under "Minor Services". (c) New department. (d) Included under "Labour and Mines".
(e) Included under "Departmental Minor Services". (f) Included under "Health".

APPENDIX V

Table I

DIRECTION OF TRADE: MERCHANDISE

Country of origin (of imports) and destination (of exports)	Total imports (f.o.b. value)		Exports of Northern Rhodesia produce (f.o.r. value)		Re-exports (f.o.r. value)	
	1952	1953	1952	1953	1952	1953
United Kingdom	£ 15,564,813	£ 18,937,290	£ 56,388,347	£ 57,215,664	£ 18,779	£ 35,216
Canada	436,550	661,298	173	1,264,813	559	2,865
Australia	635,021	712,706	1,999,299	8,439	2,523	3,145
New Zealand	77,195	200,265	5,470	2,931	451	1,883
India	406,490	702,879	424,626	436,417	195	149
Hong Kong	138,872	368,474	501	6,189	383	—
Ceylon	84,704	95,494	—	—	—	—
Kenya	54,156	13,148	24,826	35	6,965	4,618
Nyasaland	43,960	1,054,502	1,243	14,858	13,360	32,060
Southern Rhodesia	6,028,348	7,682,094	1,392,105	1,871,014	473,561	533,168
Union of South Africa	12,381,039	15,063,881	5,444,583	3,647,753	206,007	343,353
Other British	103,114	126,704	6,447	21,891	31,018	24,602
Total British	35,954,262	45,618,735	65,687,620	64,490,004	753,801	981,059
Austria	134,752	125,282	—	715	—	2
Belgium	941,689	614,630	4,122,270	3,351,956	—	—
Belgian Congo	203,898	294,875	541,620	511,057	117,225	99,321
Angola	60,207	2,153	—	80	6	2,108
Czechoslovakia	54,315	11,805	—	—	—	—
Denmark	12,891	8,133	35,005	170,613	—	102
France	159,665	168,718	84,476	807,424	63	78
German Federal Republic	444,013	427,251	1,468,960	2,275,894	70	82
Netherlands	81,084	60,234	933,824	219,472	—	87
Netherlands West Indies	450,540	653,811	—	—	—	—
Italy	319,496	33,293	70,288	1,012,051	3	4,009
Norway	40,929	9,812	2	11	178	103
Mozambique	169,377	54,235	984	5,246	703	700
Finland	96,731	76,261	—	—	—	—
Sweden	150,737	142,252	3,588,062	3,027,794	431	15
Switzerland	129,027	131,066	49	77	36	105
Japan	450,702	116,965	—	8,049	—	—
Iran (Persia)	139,096	18,035	—	—	—	—
Bahrain	200,039	242,630	—	—	—	—
United States	2,402,466	2,948,076	5,177,794	17,845,301	1,914	3,132
Other Foreign	164,482	74,638	18,860	16,201	706	41
Total Foreign	6,806,136	6,214,095	16,042,194	29,251,941	121,338	109,885
TOTAL MERCHANDISE	42,760,398	51,832,830	81,729,814	93,741,945	875,139	1,090,944

Table II
TOTAL IMPORTS BY CLASSES

Class and Description		December		January-December	
		1952	1953	1952	1953
I a b c	Animals, agricultural and pastoral products	£ 29,204	£ 35,454	£ 78,053	£ 811,333
I d	Foodstuffs	325,886	426,354	3,411,420	4,667,318
II a	Ales, spirits, wines, etc., potable	38,379	33,311	385,956	443,696
II b	Spirits, non-potable	3,029	2,089	25,935	33,745
III	Tobacco	56,024	75,589	726,687	932,114
IV	Fibres, yarns, textiles, etc.	371,963	597,365	5,417,071	6,604,386
V	Metals and manufactures of	1,988,807	1,545,401	20,417,714	24,473,677
VI	Minerals, earthenware, glassware, etc.	208,793	301,283	2,324,335	2,898,293
VII	Oils, waxes, resins, paints, etc.	162,938	192,212	2,157,363	2,346,513
VIII	Drugs, chemicals, etc.	122,945	65,366	1,081,330	1,195,725
IX	Leather, rubber and manufactures of	91,910	150,246	1,162,010	1,518,303
X	Wood, cane and articles of	114,721	119,481	1,428,612	2,067,082
XI	Books, paper and stationery	54,125	68,319	815,294	788,063
XII	Jewellery, timepieces, fancy goods and musical instruments	33,149	54,720	489,074	521,461
XIII	Miscellaneous	184,431	232,770	2,134,544	2,531,121
TOTAL MERCHANDISE		3,786,304	3,899,960	42,760,398	51,832,830

Table III
TOTAL EXPORTS (INCLUDING RE-EXPORTS) BY CLASSES

Class and Description		December		January-December	
		1952	1953	1952	1953
I a b c	Animals, agricultural and pastoral products	£ 19,736	£ 24,787	£ 252,765	£ 307,671
I d	Foodstuffs	8,042	47,837	195,711	352,873
II a	Ales, spirits, wines, etc., potable	484	1,198	5,388	6,015
II b	Spirits, non-potable	27	3	100	62
III	Tobacco	1,095	4,803	1,120,992	1,560,873
IV	Fibres, textiles, apparel, etc.	6,266	24,498	196,669	194,112
V	Metals and manufactures	6,153,473	8,146,158	80,120,331	91,562,293
VI	Minerals, earthenware and glassware, etc.	12,136	12,149	147,397	129,342
VII	Oils, waxes, resins, paints, etc.	1,260	14,288	39,804	90,175
VIII	Drugs, chemicals, etc.	1,865	6,146	15,542	41,807
IX	Leather, rubber and manufactures of	1,366	2,705	15,520	21,363
X	Wood, cane and articles of	19,386	20,346	319,366	343,022
XI	Books, paper and stationery	798	2,162	10,825	17,866
XII	Jewellery, timepieces, fancy goods and musical instruments	21,185	3,698	19,761	21,862
XIII	Miscellaneous	9,987	16,337	144,782	183,553
TOTAL MERCHANDISE		6,238,106	8,327,115	82,604,953	94,832,889

APPENDIX VI
VALUATIONS AND RATES

	Gross rateable value of buildings	Gross rateable value of land	Rateable value of exempt buildings	Rateable value of exempt land	Rate in the £ on buildings	Rate in the £ on land	Product of rate on buildings	Product of rate on land
Broken Hill	£ 1,857,260	£ 311,000	£ 42,860	£ 7,240	d. 1½	d. 7	£ 11,340	£ 8,860
Chingola	810,740	208,135	13,695	600	1	4	3,190	3,740
Choma	398,535	92,125	13,520	—	2	6	3,321	2,303
Fort Jameson	342,655	49,715	9,420	640	2½	6	3,471	1,227
Kafue	132,175	32,240	35,695	5,760	1	6	402	662
Kalomo	70,600	21,770	13,200	1,465	2	6	588	544
Livingstone	2,562,091	589,029	134,700	14,700	2	8	20,228	19,144
Luanshya	828,850	205,446	63,350	15,040	4.8	7.2	14,690	5,685
Lusaka	5,616,300	2,305,790	(a)	(a)	3.75	11.25	59,213	61,924
Mazabuka	301,395	43,310	16,565	4,850	1.8	2.4	1,788	515
Monze	117,775	20,580	—	255	2	6	986	428
Mufulira	1,141,433	294,431	259,638	88,322	1	4	2,846	1,920
Ndola	4,124,249	1,301,805	156,263	186,015	2	8	32,281	36,208
TOTALS	18,304,058	5,475,376	758,906	324,887			154,344	143,160

(a) No valuations placed on exempt properties.

NORTHERN RHODESIA

SCALE IN MILES -
0 10 20 40 60 80 100 120 140 160 180 200

TOWNS WITH HOTELS

ROADS

RIVERS

REST CAMPS

NDOLA

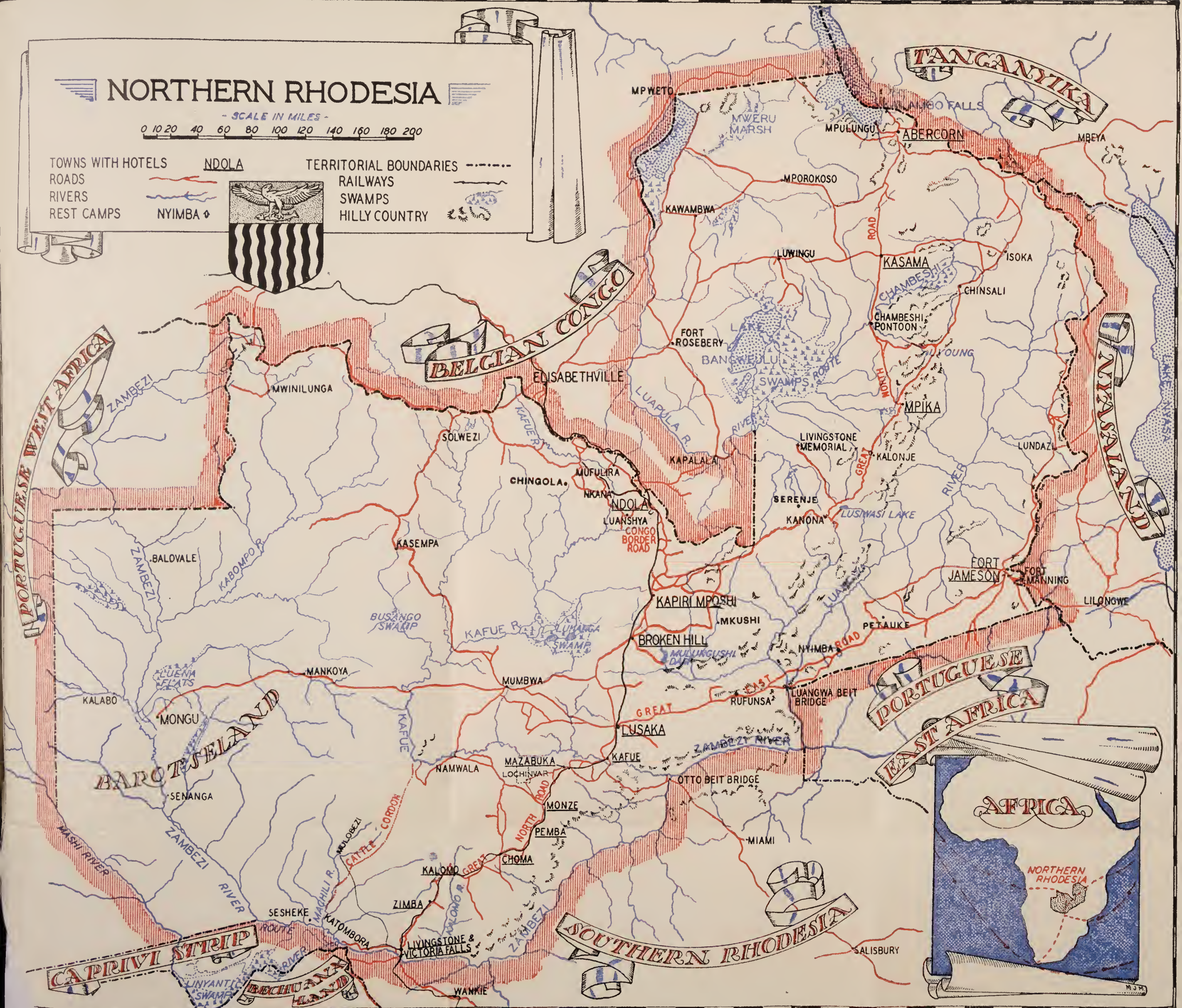
TERRITORIAL BOUNDARIES

RAILWAYS

SWAMPS

HILLY COUNTRY

NYIMBA



COLONIAL REPORTS

ANNUAL REPORTS

BASUTOLAND	GOLD COAST	N. RHODESIA
BECHUANALAND	HONG KONG	NYASALAND
PROTECTORATE	JAMAICA	SARAWAK
BRITISH GUIANA	KENYA	SIERRA LEONE
BR. HONDURAS	FED. OF MALAYA	SINGAPORE
BRUNEI	MARITIUS	SWAZILAND
CYPRUS	NIGERIA	TRINIDAD
FIJI	NORTH BORNEO	UGANDA

BIENNIAL REPORTS

ADEN	*GIBRALTAR	*ST. VINCENT
*BAHAMAS	*GILBERT AND	SEYCHELLES
*BARBADOS	ELLICE IS.	SOLOMON IS.
BERMUDA	*GRENADA	*SOMALILAND
CAYMAN IS.	LEEWARD IS.	*TONGA
DOMINICA	NEW HEBRIDES	TURKS AND
*FALKLAND IS.	*ST. HELENA	CAICOS IS.
*GAMBIA	ST. LUCIA	ZANZIBAR

*These territories will produce a Report for 1952-53 and the remainder for 1953-54.

A standing order for selected Reports or for the complete series will be accepted by any one of the Sales Offices of H.M. Stationery Office at the following addresses: †York House, Kingsway, London, W.C.2; †423 Oxford Street, London, W.1; 13a Castle Street, Edinburgh, 2; 39 King Street, Manchester, 2; 2 Edmund Street, Birmingham, 3; 1 St. Andrew's Crescent, Cardiff; Tower Lane, Bristol, 1; 80 Chichester Street, Belfast.

A deposit of £6 (six pounds) should accompany standing orders for the complete series.

† Post orders for these Sales Offices should be sent to P.O. Box 569, London, S.E.1.

ORDERS MAY ALSO BE PLACED THROUGH ANY BOOKSELLER

